E 13072

STAFF RIDES
AND
REGIMENTAL TOURS

STAFF RIDES

AND

REGIMENTAL TOURS

BY

COLONEL R. C. B. HAKING

LONDON
HUGH REES, LIMITED
119 PALL MALL, S.W.
1908

PREFACE

THE methods of conducting Staff Rides and Regimental Tours described in this book have been derived from considerable experience in such forms of exercises, both from the point of view of the instructor and the instructed.

If any passages in the book appear to be didactic, the reader is requested to interpret "must" and "shall" to mean that no better method has yet been invented. The author does not wish to convey the impression that these methods are the best, because there is little doubt that the light of further experience will disclose many possibilities for improvement in the detail of the work. The main principles, however, will vary but little, and it is hoped that the suggestions put forward will be of service both to the officers who attend Staff Rides or Regimental Tours for purposes of instruction and to those who are called upon to direct them.

The scope of the book is limited to comparatively small Staff Rides, such as are held in "Commands," Divisions and Brigades, to Regimental Tours, and to other Regimental Exercises on the ground. Larger Staff Rides, or those where Naval and Military Officers carry out combined operations, are dealt with very briefly, partly because they are conducted on similar lines to those mentioned above, and partly because they are invariably conducted by the higher military authorities of the army.

The author has obtained his knowledge from personal acquaintance with so many Officers during the last twelve years that it is impossible to mention all those whose ideas may appear in the book. Briefly it may be stated that any credit which may accrue to the book is due to the Staff College and to its many distinguished Officers, both on the directing Staff and amongst the students, whom it has been the good fortune of the author to serve with for several years.

Care has been taken to explain the small details which require attention in order to ensure success, so that any one who has had no previous experience of conducting or taking part in these forms of instruction may avoid certain pitfalls and readily acquire sufficient knowledge of the subject. For this reason it is hoped that the book may prove useful to officers of the Territorial Army and of the Imperial Forces beyond the seas, as well as to those of the Regular Army.

R. H.

BULFORD, 1908.

CONTENTS

CHAP.		PAGE
I.	Training of Officers for War	1
II.	Preliminary Arrangements for a Staff Ride	18
III.	The Preparation of the Scheme	42
IV.	The Preparation of the Scheme—*continued.* Examples of Detachments which can form the Basis for the Scheme	53
V.	The Preparation of the Scheme—*continued.* The Elaboration of the General and Special Ideas	96
VI.	A Summary of the Steps to be Taken in the Preparation of the Scheme, extracted from Chapters III. to V., with some Additions	132
VII.	The Preparation of Schemes taken direct from History	147
VIII.	Method of Directing a Staff Ride	166
IX.	Staff Rides when only One Side is Represented by a Party of Officers	188
X.	Staff Rides for Practising Operations against Semi-civilised or Savage Tribes	196

CHAP. PAGE

XI. Examples of Strategical, Tactical, and Administrative Problems, suitable for Staff Rides, and a Consideration of the Instructions which should be given to Reconnoitring Officers 223

XII. The Method of Preparing Narratives of the Operations 251

XIII. Suggestions for Criticising Work and for Conducting Conferences 262

XIV. Notes on the Work Done by Officers during a Staff Ride

A. A Study of how to Write an Appreciation of a Situation . . 274

XV. Notes on the Work Done by Officers during a Staff Ride—*continued*

B. Orders and Instructions . . 292

XVI. Notes on the Work Done by Officers during a Staff Ride—*continued*

C. Reports of all kinds, especially Reconnaissance Reports . . 306

Under the sub-headings:—

(1) Security 309

(2) Attack 318

(3) Defence 324

(4) Administration . . 337

D. Sketches 343

E. Diagrams and Graphics . . 346

CHAP. PAGE

XVII. Regimental Tours 357

XVIII. Suggestions for conducting Tactical Exercises on the Ground, during a Staff Ride, a Regimental Tour, or as a single Exercise 373

Under the sub-headings :—

A. Outposts 385

B. The Action of an Advanced Guard 391

C. The Action of a Rear Guard . . 403

D. The Attack 410

E. The Defence . . 422

XIX. Tactical Exercises on the Ground—*continued*

A. Exercises for Cavalry Officers only 438

B. Exercises for Artillery Officers only 448

XX. Two Examples of a "One-day" Exercise, worked out near the quarters of the Officers who took part in it . . 454

XXI. The Method of Conducting a "War Course" for Regimental Officers . . 489

LIST OF SKETCHES

The Sketches are placed in a pocket at the end of the book. Sketch No. 1 contains, on the reverse, the Diagram and Graphic referred to in Chapter XVI, p. 350. The other Sketches are printed in a small pamphlet, Sketch No. 23 occupying the whole of the outside cover. The remainder, from No. 2 to No. 22, are arranged in proper sequence, commencing on the second page of the pamphlet. The locality shown on each Sketch, the Chapter, and, when necessary, the page where it is referred to are indicated below.

No. of Sketch	Locality	Chapter
1. (*Face*)	Ireland, country round the Galty Mts.	V, IX, XI, XVII, XVIII, 393
(*Reverse*)	Diagram and Graphic . . .	XVI, 350
2. . .	England, South	IV, 55
. .	India, N.W. Provinces, etc. . .	IV, 58
. .	India, Quetta District . . .	IV, 60
5. . .	England, Tewkesbury and Gloucester	IV, 62
6. . .	S. Africa, country round Bloemfontein	IV, 64
7. . .	France, Eastern portion . . .	IV, 66
8. . .	England, North	IV, 68
9. . .	S. Africa, country round Ladysmith .	IV, 70
10. . .	Austria, Middle Danube . . .	IV, 72
11. . .	America, Shenandoah Valley . .	IV, 74, VII, 148
12. . .	England, Middle Thames . . .	IV, 75
13. . .	Turkey, Balkan Mts.	IV, 76
14. . .	Germany, country round Jena . .	IV, 77
15. . .	Ireland, Leinster and Munster . .	IV, 92, V, VI, 150, IX, 190, etc. XI, 231, etc. XVII, XVIII
16. . .	America, Virginia; India, S.E. . .	IV, 84
17. . .	S. Africa, Cape Colony, Cape Town .	IV, 88
18. . .	To illustrate a strategical situation .	V, 96, VI, 139
19. . .	Turkey S. of the Danube . . .	IV, 71, 76
	Ireland E. of the Shannon . . .	VII, 152, etc.
20. . .	Appreciation of a situation . .	XIV, 277
21. . .	North Wales	X, 199
22. . .	England, country N. of Plymouth .	XX, 460
23. . .	England, country N.W. of Plymouth	XX, 473

STAFF RIDES AND REGIMENTAL TOURS

CHAPTER I

THE TRAINING OF OFFICERS FOR WAR

THERE are four methods of imparting military instruction to officers, and their value may be indicated in the following order:

1. Practical experience in front of the enemy in war.
2. Practical experience on the ground with troops in peace.
3. Practical instruction on the ground without troops in peace.
4. Theoretical teaching from books or instructors indoors.

Every one of these is essential for the creation of efficient commanders, staff officers, and regimental officers in war. It is the object of this volume to deal with the third form of instruction noted above, and to show how the fullest value can be obtained from the fourth method by means of the third.

Officers are apt to regard everything they read or learn from books as theory, and everything they do with troops either in peace or war as practice. There is no objection to this aspect of the matter, provided due value is attached to the theory. It should be remembered always that what

is written in such books as "Combined Training" is intended to help officers when they meet the enemy, and not merely to assist them in passing examinations for promotion. The sternest examiner, and the most difficult to please, is war; so that officers when studying their profession should endeavour to qualify themselves for success in the great examination of war. If they do this they will find little difficulty in passing their examinations in peace time.

There has been in the past a good deal of prejudice against "book learning," and the reason for this is partly due to our previous experience in war, where the bold, dashing leader, who may not have been highly educated, always came more prominently to notice than others, who may have carefully studied their profession, but who did not possess these qualities to such a marked degree, or who, if they did, had no opportunity of showing them. Many of these latter officers had taken high places in the numerous examinations they had been called upon to pass, but war requires not only education, but also great determination of character. In our small wars no great education is required to enable officers to do their duty and pass muster, but in a great campaign education is almost as necessary as determination of character.

Prior to the South African War there is little doubt that education was looked down upon. Officers quite rightly gained advancement in proportion to the number of campaigns they were able to take part in, and by their brilliant action in front of the enemy. There was in consequence little inducement for officers to pass difficult examinations, and furthermore the examinations themselves, and the courses of instruction preceding them, were not always of a very practical nature. One of the most important branches of military education appeared to be Topography, though it is difficult to understand why

so much value was attached to it for so long a period, unless perhaps because it taught officers a knowledge of ground, but this could be taught more effectively by exercising them in the solution of tactical problems on the ground.

Another reason for the disparagement of "book learning" is that there always appears to be some unreality about what is written in a book, especially a book on military subjects, since the lessons it contains are not brought home to the reader in the same manner as lessons learnt on the ground. We find that though officers can learn the principles of war from books, and can even write excellent books on the subject, they are not always able to apply these principles when they find the enemy in front of them. The teaching of books is then forgotten, and the officer or soldier only remembers what he has learnt and constantly practised on the drill ground, at training, or at manœuvres.

It should be remembered that the experience of one individual, even in war, is very limited, and that if we hope to master our profession and become able commanders, we must have recourse to books. The matter contained in some of these books has been carefully thought out by the greatest authorities on war, as is the case with our drill books, or "Combined Training." Other books may contain the theories and opinions of only one author, but these have been arrived at by a careful study of the subject, or by practical experience, and in consequence are worth our close attention. But however good the books may be, the soldier does not appear to gain full value from them unless he has had opportunities of practising on the ground the theories and instructions they contain.

Belief in the truth and efficacy of what we learn from books is also essential, otherwise we shall forget it, or fail to apply it, when we find the enemy in front of us. To

gain belief in what we learn, it is essential for us to practise the lessons in peace time, and find out for ourselves that what is taught will be really useful to us in war, and is not mere theory. We can only do this by applying the lessons to a definite situation in a peace exercise on the ground.

There appear to be three stages of instruction in the art of war.

First, we must learn the principles of strategy, tactics, and administration. That is comparatively easy; we can learn them from a book, or get some one to teach us. Many of us stop at this first stage, and think that we have learnt the whole art of war.

Secondly, we must learn to apply these principles to definite situations, on a map for strategy, on the ground for tactics, and by working out problems in administration. This is not so easy: we want good practical instructors to teach us, men who have both seen and studied war, and who will deal with the problems that arise in a sound, common-sense manner. We also require the opportunity and the ground. Opportunity comes to the man who makes it, and with a little trouble suitable ground can be found for the instruction of small parties of officers or non-commissioned officers without trespassing on private land.

Thirdly, as already stated, we must believe in the truth of what we learn, or we shall not apply our knowledge to defeat the enemy; and if we do not do this our knowledge of the art of war is useless, and the time we have devoted to its study is thrown away. When we find ourselves in difficulties on service we shall not profit by the experience of others, and overcome those difficulties in the determined and able manner of many brilliant officers who have led troops in the past.

The British officer has sometimes failed in war because

he has been afraid, not of the enemy or of being shot, but of *doing the wrong thing*. The result has been that he has done little or nothing, and has allowed the enemy to do what he pleases. He has allowed the enemy to surround his force or gain some important ground in the vicinity, and then perhaps a regrettable incident has followed. There is no more effective way of overcoming this fear of doing the wrong thing than by constantly working out small tactical problems on the ground.

It is sometimes said that too great a strain is placed on the imagination of officers at these peace exercises without troops; also that the British officer as a class is peculiarly unimaginative. The truth of these statements is doubtful, but even if we accept them there is nothing to prevent us from endeavouring to remedy the defect. With a little care all subjects which require too great a stretch of the imagination can be eliminated, and with a little trouble the mind of the most unimaginative officer can be trained sufficiently to enable him to gain much practical value from this form of instruction.

We cannot practise beforehand every situation which will arise in war, because situations are so numerous and change so rapidly that it is out of the question. We can practise, however, those which most commonly arise, and we shall find that the situations do not vary so extensively as the ground. The details of an attack, of a defensive position, or of outposts are much the same for the small units of an army under all conditions of war. We know when we are attacking that we must send a few scouts ahead during the early stage of the operation, that later we must deploy a weak firing line which will endeavour to gain ground to the front, but will soon require reinforcement, until finally the attacking line contains as many men as can use their rifles with effect. We know that during all this time the artillery must be helping the infantry,

and that the cavalry must be guarding the flanks. What we wish to learn is how all these operations can be carried out under varying conditions of ground. We cannot learn this from books; we must go to the ground to practise it.

In war we may have to attack across an open plain, move through thick woods or country enclosed with fences, cross a difficult obstacle such as a swampy stream or a river, or climb a precipitous hill. Many other conditions of ground present themselves, and each one has to be treated in a somewhat different manner. That is to say, the companies, squadrons, and batteries must move and fight in a different manner in order to gain the greatest advantage from each type of ground. The officer commanding these small units has to look at the ground before he moves his men either for attack, defence, outposts, or for a bivouac; and in these peace exercises we can assume a definite situation and study the ground for a particular object, even though the soldiers are not actually present, without unduly exercising our imaginations.

In modern war it is far more important than it has ever been in the past for junior officers to be highly trained. In the old days companies, battalions, brigades, and even divisions went into battle in close order side by side, or one behind the other. The General in chief command was able to conduct the operations even of the firing line, and orders could be conveyed rapidly to every part of the field. Under modern conditions of war the Commander-in-Chief, by bold and skilful strategy, can bring his army into battle under favourable circumstances to himself and under unfavourable circumstances for the enemy, by skilful tactics he can prepare a blow against the enemy's weakest point, but it is the company commander, assisted by the battery and squadron leaders, who must deliver that blow. It is these subordinate officers

who to a great extent will win the battle, and it is of vital importance, therefore, that they should be highly trained, so that they will know at all times what to do, and will be prepared to do it without waiting for instructions.

It should be remembered that the battles of the Franco-German War were won mainly by the highly trained German captains. The strategy was good, but the subordinate Generals, though they showed great initiative and determination, did not display great tactical skill when bringing their troops into battle. The company commanders, however, by their bold and skilful leading, always pressing forward, always taking advantage of ground, and helping each other, assisted by the close co-operation of the artillery, were the chief cause of the German success. In Manchuria we learn the same lesson: the stubborn defence of the Russian captains, and the brilliant attacks of the Japanese company leaders, had quite as much effect on the campaign as the higher direction. It also appears that the battles were won by the successful attack of a comparatively small portion of the army that was engaged, and this fact accentuates the necessity for subordinate commanders to be men of great determination and highly trained in the art of war.

It seems so easy for a General with a large force under his command to know what to do and how to fight the battle, but it is so difficult for the company commander in the front line of battle, with the air full of bullets and shells, and with no one to help him, to know what is the right course to follow. The only way he can learn is to study such books as "Combined Training" in peace time, and apply the lessons so obtained to different situations on the ground, either with or without troops, and realise that by the success or failure of his own personal exertions the battle will be won or lost.

It has been found by experience at the Staff College and

elsewhere that officers learn more rapidly, and remember what they learn more easily, by means of a Staff Ride, or a Tactical Exercise on the ground, than by any other form of instruction. These exercises were first made use of in the British Army as a means for instructing officers at the Staff College in the correct way of applying the principles of strategy and tactics to a definite situation presented by a scheme, and also for teaching them the proper method of reconnoitring ground for strategical, tactical, and administrative purposes. When Staff Rides were first introduced the officers were left a good deal to themselves when working out these details on the ground. They did a vast amount of reconnaissance and made numerous reports, but the instructing staff, who were very limited in number, had no time to deal adequately with the work, and could do little more than glance through the reports and make a few comments at the end. Their work was returned to the officers several days, and sometimes several weeks, after the conclusion of the exercise, when, owing to press of other work, they had forgotten or lost interest in it.

It was soon realised that this method of instruction could be greatly improved upon. First it was apparent that the exercise approached the nature of an examination rather than a course of instruction, that errors made one day were repeated on the next and following days, and that officers got into a way of writing a sort of sealed pattern report to suit the nature of the work in hand, without sufficient reference to the peculiar requirements of the situation or of the ground.

A great improvement occurred when it was recognised that the work done each day by an officer must be carefully studied and commented upon by the instructor the same day, and must also form the subject for discussion at the evening conference. By this means far more instruction

could be imparted and the exercise became less of an examination, because the instructor, if he disagreed with the officer, was compelled to give his reasons. The officer also had an opportunity of putting forward his own views, and much useful discussion followed. The good arrangements and suggestions made by some officers and the mistakes made by others could be brought to the notice of all when the facts of the case were fresh in their minds. This required an increased staff of instructors at the Staff College, and it was finally realised that, even with expert instructors working continuously during a Staff Ride from 7 A.M. till after midnight, it was impossible to deal effectively with the work of more than eight officers, and at the same time provide the officers under instruction with sufficient work to do.

The next improvement was in the method of preparing the scheme for a Staff Ride. Formerly they were evolved entirely from the brain of the instructor. The British Fleet was sent conveniently to the bottom of the sea, hostile army corps landed with extraordinary rapidity on open beaches regardless of the weather, the coast defences of England were captured by an infantry attack after a few hours' fighting, and in fact the scheme was sometimes so unreal that a good deal of interest was lost in the solution of the problem.

Most authorities are now agreed that, as a general rule, the best method of preparing a scheme is to take a situation complete from some campaign in history, and transfer the scene of operations to the desired locality in England, India, &c. The troops on each side are then placed in a similar position to that which they occupied in the real campaign, and the operations are then commenced or continued as the case requires. The advantage of this system, apart from its reality, is that the scheme is untrammelled with questions regarding the cause of the war, the defeat

of the fleet, the landing of the army, and many other difficulties which will be noted later. The officers taking part in the Staff Ride find themselves in the same strategical position as those who took part in the real campaign from which the scheme was taken. The only variation lies in the features of the country, which, of course, are necessarily different from those in the real campaign. This difference, however, is a distinct advantage, because, when studying military history, we frequently find the same situations arising; but, owing to the features of the country, the improvements in arms, or other causes, they have to be dealt with in an entirely different manner. At the Staff College a campaign has been selected sometimes which the officers have studied beforehand, and though they were aware of the mistakes made by one commander and the superior military capacity of the other in the real campaign, it was frequently found that these mistakes were repeated, and the plans were not always so well laid as in the example.

By means of these Staff Rides officers can be given the most valuable instruction in the following strategical, tactical, and administrative problems:

(*a*) The preparation of plans of campaign, commonly called "Appreciations of the situation."

(*b*) The organisation of systems of intelligence in peace and war in different circumstances.

(*c*) The organisation and defence of the base and of the line of communication of the army, either by sea and rail, as in South Africa or India; by river, as in Egypt or Burma; by rail, road, and mountain tracks, as in the Tirah; or by any combination of these.

(*d*) The study of strategical and tactical situations from day to day, and the various reconnaissance work that is necessary before the troops can march, attack, defend, halt, pursue, camp or bivouac with as much safety and comfort

as possible, and without unnecessary loss of time and efficiency.

(*e*) The preparation and issue of orders in all circumstances.

(*f*) The transportation of troops by land and sea, including the movement of troops by railway, road, canal, river, and lake, over mountains, deserts, rivers, marshes, and open or close country of every type.

(*g*) The study of questions of transport of every description: the peculiarity of the animals, their special food, their requirements as regards class of road, hours of rest, climatic influences, suitable drivers, load tables, system of organisation in companies or sections, source whence they can be obtained, how they are to be transported to the theatre of war, the necessary rest before employment at the front, and many other points which will readily occur to the staff officer.

(*h*) The supply, either from the base or locally, of food, forage, ammunition, clothing, equipment, soldiers to replace casualties—in fact, everything that is required to keep the army efficient and up to strength during the progress of the campaign—and to ensure that the regimental officers and men are provided with all attainable means of executing their duties in front of the enemy.

(*i*) The preparation of despatches for the home Government and for higher commanders, the organisation of a proper system for collecting accurate accounts of the various events of the campaign, including the number of troops employed on different dates and in different parts of the theatre of war.

(*k*) The discipline of the army, the collection and disposal of sick, wounded, prisoners of war and captured material, the burial of the dead after battle, arrangements for an armistice, and reception of flags of truce.

It will be observed that a great deal of the work which

included and dealt with in the training of staff officers. It will be found, when approached from this point of view, that the tactical and administrative exercises called Regimental Tours are of the greatest assistance to regimental officers. If these exercises could be conducted on one principle, a school of thought and action could be introduced which would be invaluable to the whole army in war.

The chief reason for any failure on the part of regimental officers in war is that they have rarely been called upon to work out small tactical problems on the ground in peace. As a campaign progresses it is found that these officers become masters in the particular form of attack, defence, outposts, &c., which it is most suitable to apply to the tactics of the enemy. The fact is they are constantly studying ground and solving small tactical problems. They know what to do and do it, without fearing that their superior officer will say that it is wrong.

The tactical study of ground can easily be taught during a Regimental Tour, better in fact than at manœuvres or even at training. There is always a good deal of hurry at manœuvres, and the training of most units is carried on at certain military centres where the ground is of one type. The officers may get very proficient in handling troops over this ground, but they will be at a disadvantage if they are suddenly called upon to face an enemy in entirely different country. It would be best, of course, if all units could be trained on different types of ground, but failing this, by means of Regimental Tours, which cost little compared with manœuvres, officers and non-commissioned officers can be taken to all kinds of ground, and can work out tactical problems with almost as much advantage as if the troops were actually there.

Anything that an officer learns with reference to the ground he will remember on the day of battle: he has, so to speak, been there before; it will come natural to him to do

the right thing, and he will do it. On the other hand, what he has learnt from books has not come to him naturally by studying the ground, but by an effort of memory, and he did not learn it at the time to enable him to lead his men in war so much as to pass an examination. He has probably forgotten it long before he goes to war, but he is unlikely to forget those occasions when he took part in animated discussions with his instructor as to the best manner of attacking over a certain piece of ground, of placing a battery, or of operating with a squadron.

An officer has not got to teach his men anything very complicated. They must learn to use their weapons as efficiently as possible, to scout, obey signals and orders rapidly, advance over different types of ground in a different manner, and occupy defensive positions in the way most suited to the use of their weapons. The attack for the company or squadron is almost always frontal; it is very rare, owing to darkness, fog, or smoke, that one company can strike the actual flank of a hostile company. So we see that it is not the situation that varies so much as the ground, and regimental officers should constantly be taken on to fresh ground and asked to draw up a scheme for the attack, defence, &c., of the particular bit in front.

The direction and conduct of a Staff Ride is quite different to that of a Regimental Tour, and endeavours will be made in the following pages to suggest a method of conducting each which has been proved by constant practice to possess some merits, but is no doubt capable of further improvement. Many Staff Rides and Regimental Tours have been somewhat barren in their results because the officers who have been directing them have not realised that the chief instruction to be imparted is the solution of strategical and tactical problems on the ground. It is decided in some command to hold a Staff Ride, the scheme is prepared and the officers are collected at the place

chosen, and then every one becomes absorbed in the plan of operations. The great question appears to be whether Colonel A is beating Colonel Z. It is a matter almost of indifference what the results may be as regards Colonel A and Colonel Z, because the able dispositions of one commander, and the mistakes made by the other, form equally good lessons for the instructors to bring to notice. What is really important is whether due attention has been paid to the ground, and whether officers have been given opportunities for studying instructive problems on the ground. All the rest of the work could have been done by Colonel A and Colonel Z on the map, and no one need have come out on to the ground at all.

It is also a common practice to collect a lot of officers on a Staff Ride and send them out to reconnoitre ground for attack, defence, or other military purpose, irrespective of whether they are staff officers or regimental officers. If we wish to train regimental officers to be staff officers we had better send them to the Staff College, where they can be properly instructed. If, however, we wish to train them to become excellent regimental officers, we should limit our instruction to those duties which they have to perform in war, and which have been summarised already. The reconnaissance of ground with a view to the preparation of elaborate reports and sketches is not among those duties. Staff Rides are for staff officers, or for those who are learning to become staff officers, and should not be confounded with Regimental Tours.

The only way of teaching regimental officers during a Regimental Tour is for the instructor to go out on to the ground with them, and issue a fairly simple problem of attack, defence, outposts, &c., and work out every detail of that problem with the officers on the ground. The natural continuity of the operation can be dealt with by a series of situations. The first situation can deal with

the placing of the troops, and each officer should be called upon to write down what he considers to be a suitable distribution. This situation can then be discussed on the ground, and the instructor should always state what he considers to be the best solution, giving his reasons, when much interesting discussion will take place with officers who hold contrary views. The second situation can then be issued, usually describing the first contact with the enemy's advanced troops; and the method of solving this problem will be dealt with in a similar manner, and so on with the third and fourth situations.

It is necessary for officers to possess maps of the country, in order to understand the general idea, but the maps should be put away as soon as possible and the officers work entirely on the ground, just as they would have to do in war. In the past we have trained our officers more by maps than is desirable, because the maps usually available for regimental officers in war are on too small a scale to be of much use tactically. No more need be said here about this form of instruction, as it is fully explained in Chapters XVII. to XX.

To sum up the above: we can learn the principles of strategy, tactics, and administration from books, but it is necessary to apply these principles to ever-varying situations, on still more varying ground, before we shall gain that solid instruction which will be of hourly service to us in war.

CHAPTER II

PRELIMINARY ARRANGEMENTS FOR A STAFF RIDE

Selection of a Locality.—There are two considerations which affect the selection of a locality for a Staff Ride. First it is necessary to find suitable accommodation for the officers, and secondly suitable ground for the class of operation it is proposed to undertake.

It has been found in practice that it is undesirable to conduct a Staff Ride from the peace quarters of any garrison, though this is the least expensive method, because the travelling expenses and allowances of officers are greatly reduced. If officers are taken right away from their peace stations they get on to fresh ground, which adds to the instruction; their attention is not distracted by local engagements, and active service conditions are more nearly approached. Officers have nothing else to do, and consequently devote their whole attention to the work on hand.

Even when it is desired to exercise the officers of a fortress in the repulse of an attack upon its defences, it is better to collect the officers in an hotel inside the fortress during the period of the Staff Ride. The advantage thus gained by the superior instruction which it is possible to impart is well worth the extra cost. As will be seen later, the officers on a Staff Ride must be in close touch with each other, just as they are in war; and if they are constantly dispersing for meals, &c., the value of the exercise is reduced.

Hotel proprietors in England are now becoming accustomed to accommodate officers for a Staff Ride, and the exorbitant prices formerly charged can be greatly reduced if arrangements are made beforehand. The following letter will usually meet with their approval:

Sir,—It is proposed to bring a party of eight officers to —, from the —th to —th February. The terms proposed are as follows: A daily charge of 11*s.* a head, to include two private sitting-rooms, one small, and one large enough to accommodate the whole party; a separate bedroom for each officer, bath, lights, attendance, bicycle or motor accommodation; a good breakfast, afternoon tea, dinner, and after-dinner coffee.

Extras: Luncheon 2*s.* 6*d.*, full board and lodging for an officer's servant 6*s.* a day, wines and mineral waters at ordinary prices.

Please state if you are prepared to accept these terms.

For smaller parties of officers, or for a shorter period, some slight increase would probably be necessary. Any town where some local function is in progress, or any fashionable watering-place during the season, should be avoided, as the charges will be excessive. If possible, all the officers on one side should be accommodated in one hotel; it is much more comfortable for them, and there is no waste of time going to and fro when they are very busy.

If suitable accommodation cannot be found elsewhere, there is no serious objection to the officers on both sides staying in the same town; but separate hotels should be allotted to each, otherwise information intended only for the Blue side is apt to reach the Red by mistake. The directing staff on each side must stay at the same hotel as the officers under instruction, so that the former will always be on the spot to answer the numerous questions

that are asked and to keep everything up to time. The director-in-chief, who decides the results of each day's operations, can remain on either side or at some other town, provided he is in telegraphic or telephonic communication with each side. It is usual for him to remain with one side for half the time and attend the conferences in the evening, and then go over to the other side.

In South Africa or in India, owing to the distance apart of towns with suitable accommodation, the officers on one or both sides must be provided sometimes with tents. This of course adds to the expense, but the value of the instruction is increased and active service conditions closely approached. On such occasions a small camp must be formed and a special officer attached to the Staff Ride to attend to the transport, camp, and messing arrangements. To avoid putting officers to extra expense, a liberal allowance should be authorised from the training grant, if possible, to cover the additional cost of living. It is undesirable, if the exercise is to be a success, that officers should be put to expense thereby. When a camp is formed it is necessary in any case to provide transport, so the transport may as well stay at the camp. It will then be possible to move the headquarters of each side whenever desired. By this means the officers can follow the movements of the imaginary force, and always be close to their work, they can ride horses, and altogether it would be the best form of Staff Ride that could be devised. To enable the assistant directors on each side to communicate the intentions of each commander to the director, and for the latter to transmit his decisions to the former, it would be necessary to establish some rapid means of communication between them; probably visual signalling would be the cheapest and the most effective, and would afford good practice for local signallers.

When officers are accommodated in hotels, as in England,

it is undesirable to change the headquarters of each side from day to day, partly because there is always trouble and expense in connection with the conveyance of baggage, and partly because an hotel manager will grant better terms if officers stay for three or four days than he will for a shorter period.

With a little care in preparing the scheme, the imaginary force can start on the first day on one side of the town selected for the headquarters, move past or through it, and the operations can close on the last day beyond it. By this means the officers will never have far to go to their work, and they will constantly be studying fresh ground. It is desirable to select a town and draw up the scheme so that railways are available running in a suitable direction, to enable officers to reach the ground rapidly and start fresh for their work.

A sea-coast town is unsuitable for the headquarters of a Staff Ride, except of course when it is desired to study the embarkation or disembarkation of troops, the reconnaissance of a coast-line, or the defence of a base of operations. In such a locality, owing to the sea, the manœuvre area, as compared with an inland town, is reduced by half; the operations would be hampered by the sea, one or both forces would constantly have a safe flank so long as it rested on the sea, and the power of manœuvre of one or both commanders would be reduced, resulting in loss of instruction.

The class of operation which it is desired to practise will rule the selection of the locality. Widely different types of ground can be found in various parts of the United Kingdom, South Africa, and India. Operations can be practised amongst mountains, woods, open and enclosed country, near rivers, and over flat, hilly, or undulating ground. It is better for the scheme to depend upon the locality selected than for the locality to depend on the

scheme, because then we can make sure of using suitable ground.

The ground selected should be of a different type to that at the ordinary peace station of the officers under instruction. For example, if it is desired to instruct commanders and staff officers who are quartered on Salisbury Plain, open rolling downs should be avoided, as they have constant practice on such ground during the whole year. It is desirable to take such officers into more enclosed country where visual communication is difficult, and where the combined action of the three arms can only be secured by the most careful staff work and reconnaissance. On the other hand, where the officers are quartered in very close country with high banks or hedges, like Essex or Devonshire, it would be best to exercise them in open country where the three arms could act more freely.

The Number of Officers to be Employed.—It does not appear to be generally recognised that the number of officers who can be usefully employed on a Staff Ride is limited by the following facts:

(*a*) One directing officer should not deal with the work of more than seven or eight officers.

(*b*) The number of officers attending the evening conference should also not exceed eight.

(*c*) Hotel accommodation in a suitable locality cannot always be found for more than eight officers added to the directing staff.

(*d*) It is difficult to obtain a sufficient number of officers of senior rank to perform the duties of director and assistant director for a large party of officers.

As regards the first of these limitations, it is only necessary to read Chapter VIII., on the conduct of Staff Rides, to realise the amount of work that the assistant director must get through during each day. Briefly, he must visit the ground where the officers are working, and study it

from the point of view of the instructions each officer has received; examine and comment upon the work done by each officer during the day and on the previous evening, and take extracts from it for discussion at the conference that night; prepare instructions for the work to be done by each officer in the evening, and on the ground next day; draw up a narrative of the day's operations from the decisions he has received from the director; and write a telegram or message to the director based on the orders of the officer commanding the side he is superintending, and describing the intentions of that officer for his operations next day. As will be seen later, if he omits any one of these things the instruction received by the officers will suffer.

After all, six or eight commanders and staff officers on each side are quite as many as can be got together conveniently in most commands. As already pointed out, there is no object in including a number of regimental officers, who only spoil the instruction of the staff officers, and do not gain much useful instruction themselves. The addition of regimental officers to a Staff Ride, especially when junior in rank, is only a source of embarrassment to the assistant director, because it is difficult to find them suitable employment, and the result is that frequently they are given tasks beyond their capabilities and rank, or else they are neglected. In either case they are not very interested in the work, and the instruction they receive is slight. Any but the very senior regimental officers or those working for the Staff College should be instructed by means of Regimental Tours and not by Staff Rides.

It has been the custom, when dealing with a large number of officers on each side, to provide several staff officers to help the assistant director, so that there may be about one directing staff officer to seven or eight officers under instruction. This is not a very satisfactory

system, and in any case it does not get over the undesirability, discussed below, of assembling a large number of officers at one conference. It is very difficult to divide the work among these directing staff officers, and it usually means that some of the work done by a senior officer is examined by a junior, who possibly has not been on the ground at all, and simply has a few reports given to him and is told to criticise them. Some Staff Rides have been held where the directing staff have been almost as numerous as the officers under instruction. On such occasions there is usually a good deal of conversation, but no great amount of instruction filters through to the officers who are brought out to learn.

The whole truth is that only one person can do the work of a director or of an assistant director. If, however, it is considered necessary to have a large number of officers under instruction, then an assistant director must be provided for every seven or eight officers, and they must do the best they can.

Though we can possibly increase the number of officers under instruction by increasing the number of assistant directors, a limit is again reached by the number of officers who can profitably take part in the evening conference. The conference should not last much longer than an hour; the best instructor cannot expect to keep the close attention of the officers for a longer period. They have already done a hard day's work, and sometimes, though this is undesirable, they have more to do when the conference is over. If twelve officers are present, then five minutes can be devoted to each officer's work—that is to say, two minutes to the work he did on the previous evening, and three minutes to the work he has done during the day. This of course is not sufficient, and an average of at least ten minutes should be allowed for each officer, which reduces the number of officers who can usefully

take part in the conference to seven or at the outside eight.

Conferences have been held on occasions consisting of twenty, forty, and even eighty officers. Such meetings simply take the form of a lecture delivered by the directing officer, frequently supplemented by a heated argument between the two commanders, if both sides are present. On such occasions no attempt can be made to deal with individual work, and the director is compelled to confine himself to a few general remarks. Another objection to a large conference is that it is difficult to get any officer to discuss a question which is raised, whereas at a small conference of seven or eight officers every one, with a little encouragement, can be induced to express his views and give his reasons for adopting or recommending a certain course of action.

The best number of officers to employ on each side is six or seven, with one assistant director superintending the work, or, if the latter has had some experience in conducting these exercises, and knows exactly what to look for in the work, he may be able to deal with eight officers.

If two assistant directors, each with seven officers, are employed on one side, and each holds his conference in the evening, then each assistant director with his seven officers must form one distinct detachment of the force, otherwise complications arise, which usually result in one of the assistant directors doing nearly all the work, and there is in consequence a loss of instruction. For example, suppose the Blue force consists of two divisions, the Blue commander and one of the divisions could be under one assistant director, and the remaining division under the other. In this case, however, it must be remembered that the officer commanding the last-mentioned division will be dependent on the officer commanding the force for his orders, and the general conduct of the operations will

only be discussed at one of the conferences, because the other assistant director will not have seen the work of the officer commanding the force.

Another solution, if so many officers are required, would be to duplicate everything, and have two independent Staff Rides going on at the same time; but under ordinary circumstances it would be very difficult to get a sufficient number of senior directors and assistant directors for this purpose, and it would be better to have two smaller Staff Rides with different schemes and at different times.

Sometimes officers have been told off to work in pairs, so that one assistant director could deal with the work of twelve officers, each pair of officers sending in only one piece of work. This again is unsatisfactory; it means either that each officer's work is halved, or that one does all the work and the other looks on. If both officers do a full day's work, then the amount for the assistant director to examine will be the same as if he had given each a separate task, and he will practically be dealing with the work of the twelve officers, which, as already shown, is beyond his power.

The available number of suitable officers to act as director and assistant director is always very limited, and it is frequently necessary to obtain the services of officers from outside the command. For example, suppose a divisional commander proposes to hold a Staff Ride, he would detail one of his infantry brigadiers to command one side and the other brigadier to oppose him. With the new organisation of three infantry brigades he could employ his third infantry brigadier as assistant director on one side and his artillery brigadier on the other. It would be necessary, however, that each of the brigadiers employed as assistant director should be senior to the brigadiers employed in command of the side. And even so the seniority would be so slight that it would be undesirable

perhaps to ask one brigadier to criticise another. In any case, if he wished to give his two senior brigadiers an opportunity of commanding a side, there would be no one in the division except himself to act as assistant director.

One way out of the difficulty is for the divisional commander to act in the capacity of director and also of assistant director on one side, and to obtain the services of a major-general from elsewhere to act as assistant director on the other side. As will be seen later, the duties of a director are not heavy: he has merely to decide upon the result of each day's operations; he is, in fact, an umpire, and his duties could be performed quite well by a junior officer, provided he does not examine any work done by a senior officer. The officer on a Staff Ride who is really the instructor is the assistant director. The director has frequently afforded valuable instruction to the officers taking part in a ride, but in that case he has been supplementing and partially taking the place of the assistant director. If this is done the director will see the work done by one side only, and he will not be able to spend half the time with one party and half with the other, as is desirable, unless he changes places with the assistant director on the other side, which method has some objections.

Another system is for a junior officer to be appointed assistant director, say on the Blue side, and the director to take the officers on the Red side. When this is done the assistant director would send to the director all the work done by officers on the Blue side who were senior to him, and the conference in the evening on the Blue side would be presided over by the Blue commander, the assistant director being asked to discuss any instructive points which he has observed when looking over the work of the junior officers. This system has frequently been tried, and it is probably the best solution of the difficulty. The divisional

commander would perform the duties of director and also of assistant director on one side, and one of his brigadiers, or his colonel on the General Staff, could act as assistant director on the other side.

Nothing is so undesirable as to collect several junior officers on the directing staff to look over and comment upon the work done by senior officers. It has been tried repeatedly, but never with success. All sorts of methods have been suggested to overcome the difficulty, but none of them are satisfactory. For example, the comments made by junior officers have been typed, signed by the director, and issued to the officers. Every one knows that it is impossible for the director to write such lengthy comments and look over so much work in the time, and as a result the remarks carry little weight, because it is known that they were not initiated by the director himself. Even a senior major-general will rarely criticise a junior of the same rank, and he is quite right. It is necessary, therefore, to appoint one officer as director who is at least one rank senior to any officer, and to obtain one or two junior officers to act as assistant directors.

The Selection of Officers and Allotment of Duties for a Staff Ride.—These depend a good deal on the class of work it is proposed to practise. It should be remembered, however, that the object of the exercise is to practise the commanders, staff officers, and administrative officers of the command in the duties they will be called upon to perform in real war, and not for the instruction of regimental officers.

As there are very few staff officers and a great number of regimental officers in a brigade of any arm, and as the commanders and staff officers of these brigades will be employed on Staff Rides held by divisional or other commanders, it is probable that the brigadier-general will, as a rule, conduct Regimental Tours rather than Staff Rides.

If, however, a brigadier-general wishes to hold a Staff Ride, he is somewhat limited in the number of officers he can usefully instruct. He has his brigade-major and four commanding officers, and he may have a few Staff College officers who happen at the time to be serving with their regiments, and a few other officers who hope to become staff officers. In any case it is doubtful if he could collect twelve officers to take part in a Staff Ride and two others besides himself to conduct the exercise. It would be desirable, therefore, to hold what has been called a single Staff Ride, where one side only is represented by a party of officers, and the operations of the opposing force are conducted entirely by the brigadier acting as director.

These single Staff Rides are very instructive, and the method of conducting them is explained in Chapter IX. One director is required, but no assistant directors, and this simplifies the matter. The force employed should not exceed a mixed brigade of all arms, and the composition of the Staff Ride might be as follows:

Director	The Brigadier-General.
Staff Officer (not really required)	The Brigade-Major, or a selected officer.
Officer commanding the force .	The officer commanding one of the battalions of the brigade.
Staff Officer	The Brigade-Major, or a selected officer.
A Supply Officer or Medical Officer can be added if required.	
Officer commanding the Infantry Brigade	The officer commanding one of the battalions of the brigade.
Officer commanding the Cavalry	A Mounted Infantry officer from the brigade.
Officer commanding the Artillery	A Battery Commander borrowed from the divisional Artillery.

This would give a total of six officers under instruction, which would be quite as many as the brigadier-general could deal with. The force might consist of one infantry brigade, from one squadron to one regiment of cavalry, and from one battery to one brigade of artillery, the amount of cavalry and artillery depending upon the

nature of the scheme and of the ground selected for the operations.

For a divisional Staff Ride both sides can be represented by a party of officers. As there are four brigadier-generals in the division, the allotment of the officers might be as follows:

Director, performing also the duties of Assistant Director on one side	The Major-General commanding the division.
Staff Officer (if required) .	The Colonel, General Staff, or the D.A.A. and Q.M.G.
Assistant Director on the other side	A Brigadier-General, or the Colonel, General Staff.
Commanding the Blue Force .	A Brigadier-General.
Staff Officer, General Staff .	His Brigade-Major.
Staff Officer for supply or medical services (if required) .	A selected officer.
Commanding the Blue Division	A Brigadier-General.
Staff Officer, General Staff .	His Brigade-Major.
Commanding the Artillery .	An Artillery officer.
Commanding the Cavalry .	A selected officer, or a Cavalry officer borrowed for the occasion.

This gives a total of seven officers on the Blue side, which is sufficient. The Blue force might consist of one division of infantry, a regiment of cavalry, and two companies of mounted infantry.

Commanding the Red Force .	A Brigadier-General.
Staff Officer, General Staff .	His Brigade-Major.
Staff Officer for other services (if required) . . .	A selected officer.
Commanding the Infantry .	A Brigadier-General.
Staff Officer, General Staff .	A Brigade-Major.
Commanding the Cavalry .	A selected officer, or a Cavalry officer borrowed for the occasion.
Commanding the Artillery .	An Artillery officer.

A total of seven officers. The Red force might consist of two brigades of infantry, two brigades of artillery, two squadrons of cavalry, a company of mounted infantry, and two companies of engineers.

There is no particular object in appointing a staff officer for supply duties alone. When the system of supply has once been established there is not much work for a supply officer to do on a Staff Ride, because he cannot actually superintend the collection and distribution of supplies and do the large amount of staff work which is necessary in real war. It is desirable, however, to appoint a supply officer and a medical officer to assist the director and suggest suitable work in their particular branches of administration. These officers would be attached to the directing staff. Of course in war the commanders would have a much larger staff than is given above, but on a Staff Ride it is impossible to invent all the work connected with administration, intelligence, supply, &c., which has to be dealt with on a real campaign, and which takes up so much of a staff officer's time.

The above examples have been given only as a guide; they must be varied to suit the requirements of each case, but they are useful to indicate what is possible. It will be seen that one side is stronger than the other. This is done for several reasons which will be explained later.

It has been the custom in the past to draw up a long list of officers, each being allotted a separate staff appointment. It has been found when this is done that during the Staff Ride these officers rarely do any work in connection with their particular appointments. The fact is that in these exercises one commander and one staff officer is sufficient for each command, as there is not enough work to provide employment for any others. For a very large Staff Ride, where a force consisting of several army corps is employed, extra staff officers would no doubt be required; but such elaborate exercises would be conducted by high military authorities, so there is no occasion to deal with them in this volume.

In the above allotment of duties it is assumed that the

assistant director will send to the director all work done by officers on his side who are of the same rank, or senior to him, for the director to examine and comment upon. That is the reason why it is suggested that the director should have a staff officer who can assist him in preparing the narratives and looking over the work done by some of the junior officers on the director's side. There may be difficulties in getting this work returned to the assistant director in time to be issued before the evening conference, but with a motor or a motor-cyclist it should be possible to do it.

When an assistant director is appointed who is junior to the commander of the force on his side, it has been the custom for the evening conference to be presided over by the commander of the force. The assistant director would be called upon to discuss the work of the officers junior to him, and also any other point which the officer commanding the force wished to be investigated. This method has, however, one drawback, because the commander of the force has enough to do without being called upon to prepare notes for the conference.

The details of a Staff Ride which would be held in one of the large commands in England, India, or elsewhere are similar in most respects to those of a divisional Staff Ride, only with larger forces. Theoretically it is desirable to exercise officers in the command, administration, and staff work of a large force, but when reduced to practice the instruction actually imparted usually decreases as the size of the force increases. The exercise is apt to drift into the consideration of the strategy of the campaign and little else. Sometimes indeed the exercise might have been carried out on paper without going on to the ground at all. When a large force is employed a study of one day's operations would last for the whole period of the Staff Ride, if all the instructive details were considered;

but what usually happens is that divisions are moved about with great celerity, a certain amount of ground is reconnoitred, and the main interest is centred in the general plan of operations and not on the ground.

Officers of the rank of major-general are usually employed to command each side, which is composed of from two to three divisions. This is the largest force which can be properly dealt with by one director, as it is necessary to have more than six officers on each side. The selection of officers and the allotment of duties might be as follows:

Director	The Lieutenant-General commanding.
General Staff	A Brigadier-General or Colonel.
„ „	Two Majors, or a Major and Captain.
Assistant Director, Red .	A Lieutenant-General (if possible).
General Staff	A Brigadier-General, or Colonel and a Major.

Assistant Director and Staff for Blue as for Red.

Assuming that the Red force consists of three divisions and two cavalry brigades, the composition of the Staff Ride might be as follows:

Commanding Red Force .	A Major-General.
General Staff	A Colonel.
Administrative Staff . .	A Major.
Commanding 1st Division .	A Brigadier-General.
General Staff	His Brigade-Major.
Artillery Commander . .	A Field Artillery Brigade Commander.
The 2nd and 3rd Divisions would be similarly constituted.	
Commanding the Cavalry .	A Brigadier-General.
General Staff	His Brigade-Major.

This gives a total of fourteen officers, which is the most that the assistant director could manage. Of course with such a large number the instruction imparted at the conferences will not be very great, for reasons already indicated, and the staff of the assistant director must criticise some of the work of the junior officers.

The Blue force might consist of two divisions, with a cavalry brigade and some heavy artillery, &t., attached. It is advisable to allot different numbers to the divisions on each side to avoid confusion. The side might be composed of the following officers:

Commanding Blue Force	A Major-General.
General Staff	A Colonel.
Administrative Staff	A Major.
Commanding 5th Division	A Brigadier-General.
General Staff	His Brigade-Major.
Artillery Commander	A Field Artillery Brigade Commander.
The 6th division would be similarly constituted.	
Commanding the Cavalry	A Brigadier-General.
General Staff	His Brigade-Major.

This gives a total of eleven officers, the sum total of officers under instruction being twenty-five, and the total of officers on the directing staff being ten; four of these latter, however, would be employed on the routine work of the Staff Ride, and would not take any part in the instruction.

It is extremely doubtful if the services of two lieutenant-generals in addition to the director could be obtained. When this is the case, the best solution is for the director to deal with all the work on one side, and for a brigadier-general or colonel to be appointed assistant director on the other side, the latter sending all work done by officers senior to himself to the director for criticism, and the evening conference being held by the commander of the side, aided by the assistant director.

The work done on a Staff Ride of this nature differs somewhat from that previously described. Major-generals and Brigadier-generals would not be expected to write reports on the attack or defence of a position, &c. These reports are prepared by staff officers in war for the assistance and information of General officers. The staff officers of

these Generals could be called upon to reconnoitre the ground in detail and draw up reports, and the Generals themselves could also go and look at the ground, and might even be asked to draw up a statement of their intentions, with their reasons, but these would, as a rule, be sufficiently indicated in their operation orders.

The chief point to bear in mind is that on these large Staff Rides the advantage to be derived is the formulation of plans of action and the preparation of operation orders. A certain amount of instruction is obtained from studying the ground, but not to the same extent as on a small Staff Ride, because it is impossible at the conferences and when looking over such a large mass of work to go into sufficient detail.

There is no doubt that the smaller Staff Rides suggested for a division are the best in every respect, so far as study of ground is concerned, but the larger ones are no doubt useful as an exercise in operations of war and field administration.

There is another form of Staff Ride which has been tried sometimes, purely for the instruction of the staff officers of a large force, such as two or three divisions. In this case the senior staff officer of the force takes out all the staff officers in the command, and each performs the staff duties of his actual appointment.

For example, the brigadier-general on the General Staff of a command might prepare a scheme where two or three divisions were operating as a detached force against an enemy, the colonel himself deciding upon the operations of both sides, these being no part of the exercise. A series of situations would be indicated each day in the narrative of the operations, and the staff officers would be given work similar to what they would do in war. This is the foundation of all Staff Rides, and the only one to which the name properly applies. All other so-called Staff Rides

and Regimental Tours are really strategical, tactical, and administrative exercises, and appertain little more to the instruction of the staff of the army than to commanders.

The composition of this Staff Ride would be as follows:

Director	The Brigadier-General, General Staff, of the Command,
Staff Officer	A selected officer for routine work.

Officers taking part in the exercise:

One or more Colonels on the General Staff.
Some of the Infantry Brigade-Majors of the Command.
An Artillery Staff Officer.
An Engineer Staff Officer.
A Cavalry Staff Officer.
An Administrative Medical Officer.
A Supply Officer.

A total of about eight officers under instruction. The work both on the ground during the day and in the evening would be largely administrative, such as the preparation of bivouacs, detraining troops, drafting orders, &c., but a certain amount of tactical training can also be imparted—in fact, anything included in the comprehensive term "staff duties."

Means of Locomotion.—There are six methods of getting over the ground during these exercises: by rail, motor, or boat, on foot, horseback, or bicycles.

Full use should be made of railways—in fact, as already suggested, the headquarters of the Staff Ride should be selected so that local railways, leading in the desired direction, are available. Railways are fairly cheap, and by using them officers can get rapidly on to the ground, start quite fresh for their work, and take their bicycles with them if required. The only disadvantage about a railway is that there are usually several trains to return by, and officers are apt to choose an early one, and not devote sufficient time to their study of the ground. This

of course should be discouraged in every possible way. It originated in topography, because formerly officers were called upon to make elaborate sketches, the best of which were not so good as the map they were copied from, and they were anxious to get home early so as to have plenty of time to "finish up" the sketch. Officers should remember that the chief value of these exercises is the study of ground for tactical and administrative purposes in war; that if they devote one hour to the ground they will gain one hour's instruction, but if they devote five hours to the ground they will obtain five hours' instruction.

The same remark applies in another way to the directing staff. Unless the staff officer who is going to criticise the work which is handed in studies the ground carefully beforehand, he is quite unable to impart any valuable instruction to officers who may have devoted many hours of work to their task. Many a Staff Ride has failed from this cause; but the failure, and the reason for it, is not always apparent to the directing staff, though the officers under instruction will discuss it freely amongst themselves. The directing staff have a great deal of work to do during a Staff Ride, and that is the chief reason why a careful study of the ground is sometimes neglected.

Motors when properly employed are invaluable on a Staff Ride, but at the same time their misuse is a frequent source of failure. Practical experience plainly shows that any reconnaissance done actually from a motor is of no value to the man who does it or to any one else. He flies over the country, he is probably talking most of the time, and he usually comes back in time for lunch and writes a report entirely from the map.

Motors should be used simply to take officers on to the ground where they are told to work, and to bring them back in the afternoon. Reconnaissance which is really worth the name can only be done on horseback or on foot,

and of the two the latter is the better. Bicycles are no doubt useful to get from the railway station to the ground and back again, but there is a great temptation not to leave the roads. When motors are employed, a regular service should be prepared up each evening for the following day. One motor can take three officers: the three that are working on ground nearest to the headquarters of the side can be sent off say at 9 A.M.; the motor should return by 10 A.M., and can then take three officers to more distant places. In the afternoon, say at 3 P.M., the motor can pick up and bring back the first party of three officers, and then fetch the second party. In winter these hours might be made a little earlier. The main object is that officers should be allowed from four to five hours on the ground. In this manner two motors would be sufficient for a Staff Ride where only six officers are employed on each side, and two more for the directing staff—a total of four, which could usually be provided without undue expense.

Motors are more important for the directing staff than for the officers under instruction. The former have a great deal of work to do and no time to waste: with a motor they can proceed more rapidly from the locality of one officer's task to the ground where another is working than by any other means. Furthermore, they can get about without fatigue, and considering the amount of work they have to get through in the day, this is very important. A directing officer who has bicycled forty odd miles during the day cannot be expected to examine work and hold a conference with the same energy as a man who has been out in a motor and walked a few miles examining ground on foot.

Boats would only be used for some special reconnaissance work, either in connection with the passage of a wide river where there are no bridges, such as the lower Thames, Medway, or Severn in England, and other larger rivers in

India or South Africa, or for reconnaissance work in connection with a disembarkation, or a coast fortress, &c. Special arrangements should be made beforehand, especially as regards the existence and working of any ferries which it is proposed to use, and which are marked on the map.

The advantages of working on foot, from the point of view of instruction, cannot be exaggerated. An officer on foot can get anywhere a soldier can get; he can examine the ground more accurately than in any other way, and the slow progress is no drawback. There is less temptation to take ground "as seen"; and for working out the details of a defensive position, of an attack, or a bivouac, or any other staff work, an officer should either be on horseback or on foot; and even when he is riding he must constantly dismount and lead or tie up his horse, which then becomes rather an encumbrance.

Horses are too expensive to take on an ordinary Staff Ride—in fact, they nearly double the cost of the exercise. They have to be billeted, and the billets must change every night, so that they will be near the work the officers have to do next day. This is by no means easy to arrange: it has been done, however, on more than one occasion, so that the method adopted may be worth considering.

The horses are first collected, not necessarily at the headquarters of the Staff Ride, but at some village near the ground where the officers will be working on the first day. The officers go from headquarters to this village either by rail, motor, or bicycle, and are informed before starting that they are to leave their horses in the evening at another village near where the officers will be working on the following day. The officers' servants, or the soldiers, if troop horses are used, who look after the horses, must proceed to this second village by train or other means during the day, and be ready to take over the horses in

the afternoon, the officers returning to headquarters by rail, motor, or cycle.

It is not always easy for the directing staff to select this second village, but it must be selected and warning given to the police some days before to have the billets prepared. An officer must be told off with a sufficient number of non-commissioned officers to have sole charge of the horses in billets, and these billets must not be changed by the riders. All sorts of complications arise in practice, but with a good officer in charge of the horses they are all surmountable. The horses cannot be kept at the headquarters of the Staff Ride, because the distance to the work would generally be too great. The only other alternative is for the headquarters to move every day with the horses, but it is very rare that suitable accommodation for a large party of officers can be found at intervals of about ten miles along any road. In India or South Africa, if a camp is formed, these difficulties disappear, and horses can be used with great advantage. It must always be remembered that they will invariably be used in war except in very mountainous country, and so it is desirable for officers to have some practice in doing reconnaissance work on horseback during peace.

The bicycle is no doubt a very useful machine, but as most Staff Rides in England take place in the winter, the roads and weather are not usually very suitable for rapid and comfortable riding. Still the main roads are fairly good, and if an officer first studies his task on the map in the manner suggested in Chapter XIV, and decides on his general plan of reconnaissance, he can go from place to place on his bicycle and do the rest on foot. A bicycle can easily be hidden behind a hedge and left, with a fair chance of its being there when the owner returns. Almost every one can ride a bicycle, but if it is intended to rely on bicycles to enable officers to reach their work, the

directing staff should ascertain beforehand whether all the officers taking part in the exercise are in possession of these machines. Officers have been detailed on occasions for a Staff Ride who are unable to ride a bicycle, and they have been a considerable source of embarrassment to the directing staff, who have been unable to find them suitable work to do. It is undesirable to make senior officers ride about on bicycles.

CHAPTER III

THE PREPARATION OF THE SCHEME

One of the most difficult tasks for an officer to undertake is the preparation of a realistic scheme for peace operations suitable to the size of the force he wishes to employ. It is hard enough for the commander of a military district with a large force at his disposal, but it is still more difficult for the captain of a company, battery, or squadron who wishes to train his men for war.

The suggestions brought forward in this chapter apply to any scheme, whether for a Staff Ride, a Regimental Tour, or peace operations with troops. If a sound system of preparing schemes can be found for one of these exercises, it should apply to all.

There are two distinct methods of approaching this subject: the scheme can be evolved entirely from the imagination of the author, or it can be derived from some incident in military history. If the first system is adopted the author must have some knowledge of war and some imagination before he can prepare a scheme at all, and it is reasonable to suppose that the merit of the scheme will depend upon the extent of this knowledge and imagination. If therefore we can analyse our knowledge of war, we may be able to arrive at some basis on which we ordinarily prepare a scheme, and then we can consider how much imagination is required to improve this into the finished article. To judge by some schemes that have been worked out in peace time, the author's imagination

must have been more extensive than his knowledge of war, because facts are stated and situations created which it is difficult to realise could occur in real war. But then if we study war carefully we find the most impossible situations arising, and so perhaps these imaginary schemes are not so bad after all.

In July 1870 who in the world could have told that by August 18 nearly the whole German Army would have been facing Berlin on the Moselle, opposed to the French Army facing Paris? Again, in April 1877 would any one believe that the whole Russian Army advancing to invade Turkey would be checked for several months by an entrenched camp at Plevna? Or again, on June 27, 1866, that a whole Prussian division of the VIth Corps should have turned south from its line of advance because an Austrian patrol had been seen on the flank? If we put such things as these in a scheme we should be laughed at. In peace operations numbers count for everything; in war the determined commander and lack of information count for thousands of men. So do not let us abuse a scheme because it appears impossible, for we may find that in real war the problems we have to solve are even more impossible.

It is better, however, when preparing a scheme for peace operations, to avoid the production of a situation, even though taken from real war, which is obviously false from a strategical point of view, or which demands an unusual stretch of the imagination. A good rule to adopt to guide us when working out the details of a scheme is to avoid the use of detachments pushed forward into an isolated position in *front* of the army at the commencement of a campaign, like General Abel Douay's detachment at Weissenburg in 1870, and to omit all conditions which necessitate any change in the physical features of the country where the peace exercise is actually to take place.

In this way it is undesirable to make imaginary rivers, or to turn a small stream into a wide river, if we propose actually to cross the river during the exercise. If, however, it is unlikely that it will be necessary to cross it, the chief objection, is removed, and the strategical effect of such an obstacle on the flank, or even between the opposing armies, can be produced without criticism. For example, if a scheme is based on the advance of the Germans before the engagement at Mars La Tour in 1870, or on the operations of part of Lee's army during the first two days of the battle of Chancellorsville, there would be no objection to the supposition that a small stream is turned into a big river like the Moselle or the Rappahannock, because there would be no occasion actually to cross these rivers during the operations which were being practised.

The same principle applies to mountains, forests, &c., which cover a large area, and where the movements of troops are confined to a few roads or passes. If it is proposed actually to carry out the operations in these mountains, all sorts of impossible situations will arise. If, however, the mountains are only required to produce a strategical situation, or to confine the operations of the opposing armies previous to the commencement of the exercise to a definite advance or a definite objective, the drawback is removed. Thus, if it is desired to prepare a scheme dealing with the operations of a force when issuing from a defile, like those of the Prussians at Nachod, Trautenau, and Turnau, of the Germans at Spicheren and Weissenburg, of the Boers at Van Reenen's Pass and Laing's Nek, or of the Japanese after crossing the Mo-tien-Ling, there would be no objection to an assumption that the country in rear of the force was mountainous, &c.

It is also unreal to create imaginary roads, railways, canals, woods, swamps, &c., or to blot out any that actually exist in the proposed locality for the peace operations.

No physical features of the country over which the exercise will take place or the troops move should be subject to any imaginary change. If it is desired for any purpose to limit the use of roads, those left available must be clearly indicated, and all others described as passable only for infantry, cavalry, artillery, or transport, according to the requirements of the case.

It is frequently found necessary to introduce an imaginary fortress into the scheme of operations. When this fortress is placed actually within the area of operations and will be approached by one side or the other, the locality of the defences, if not the forts themselves, must invariably be given. Both sides would know this in real war, because though their armament, garrison, trace, profile, &c., may be kept secret, the fact that a permanent fort has been built in a certain locality in peace time is apparent to all the world. When this is neglected all kinds of false assumptions are adopted by each side during the exercise, umpiring becomes more difficult than ever, and the instruction imparted is reduced.

The weather and climatic conditions should be accepted as on the day of the exercise; the only occasion when some imaginary change would be necessary is when practising operations in mountainous country like Wales for the purpose of studying mountain warfare against the tribes on the north-west frontier of India, or when practising in India or South Africa operations which might take place in Europe or elsewhere.

It has already been explained that a comparatively small force is required in order to obtain the best results from an ordinary peace exercise. During a Staff Ride it is desirable to exercise the commanders on each side, who will almost invariably be General officers, in the solution of strategical as well as of tactical problems. We cannot introduce armies into our scheme, and war is not waged

with detachments alone, so we are compelled to discover a sound strategical reason why a detachment should be made. By this means the commander is given some independence in his plan of operations, and consequently is able to exercise himself in the application of the principles of strategy to a definite situation in the proposed theatre of war.

When preparing a scheme for operations with troops, or for a Regimental Tour, when the chief object is not to train the commanders and staff officers, but to exercise the troops in the duties they must perform in front of the enemy, there is no great difficulty in producing the required detachment, because no great independence of action on the part of the commander is required. Thus the operations of an advanced or rear guard, a flank attack or part of a frontal attack, an outpost position, &c., can be practised, the imaginary main body being close at hand. Schemes for such operations will be considered in Chapter XVII., Regimental Tours, and in Chapter XVIII., Suggestions for Conducting Tactical Exercises on the Ground.

For a Staff Ride, or for extensive manœuvres, a somewhat independent detachment is absolutely necessary, and if we can arrive at a sound method of creating this detachment our chief difficulty in preparing the scheme will be overcome. The mistake that has been made sometimes in the past is that a detachment has been produced at the very commencement of a war. This leads to false strategy and lack of realism in the scheme. The first principle of war is to concentrate superior force at the decisive point, which latter, at the commencement of a campaign, must be, almost invariably, the first battle-field. No General, if he can help it, will make detachments at such a time, and the reasons for making a detachment are not so urgent then as later on in the campaign.

If we go to military history we shall find that com-

manders who have commenced operations by dispersing their forces in order to be safe everywhere have frequently been beaten. The Austrians made unnecessary detachments in 1866, and the French in 1870; and though the Germans in both these campaigns exposed themselves to defeat in detail by invading on two separate lines, the forces of their opponents were so weakened by these detachments that they were quite unable to derive any advantage from the opportunity which the Germans, owing to the size of their army, the obstacles to be traversed, and political reasons, were compelled to offer them. The Boers failed to apply the principle of concentration in 1899. Instead of assembling their commandoes and invading Cape Colony or Lower Natal, they split up their forces into several weak detachments, and wasted their strength on the siege of certain towns, when far more decisive results could have been obtained by concentration elsewhere. If further examples are required, they are furnished by the Turks in 1877 and by the Federals in 1862, and even the Confederates in 1863. On each of these occasions the dispersion of the army was one of the chief causes of failure.

Later on in a campaign we find that both belligerents are compelled to make detachments, either to deceive the enemy as to their real intentions, to induce the enemy to make a still larger detachment and thus weaken his main army, or to guard some vital point. It appears desirable, therefore, to select our schemes from the middle of a campaign rather than from its commencement, and fortunately we have numerous models to work on.

Several schemes that have been prepared for Staff Rides in England have commenced by stating that an invading army has landed at some coast town on the shores of England and is advancing inland. As this invading army is too large for the purposes of the Staff Ride, a detach-

ment is at once introduced. A brigade, division, or army corps, according to the size of the force required, is landed somewhere else. In order to produce a detachment on the other side, the British Army is either widely scattered or it has not mobilised, a state of affairs which is hardly complimentary to the high military authorities who regulate such matters. If we must imagine that an army has landed on the shores of England, it would be better to go a step further and imagine that England is a foreign country; it is so much more satisfactory to intrude on territory belonging to some one else than to have our own invaded. From the point of view of a Staff Ride this has a further advantage, because we can place the capital, which is always a powerful strategical magnet, in a locality which is most suitable for our particular scheme.

It is better, however, not to base the scheme on the landing of the force, but to place the two main armies in the position required, give the invader a suitable base, assume that one or two battles have been fought, and then endeavour to discover a sound strategical reason for making a detachment on each side. When formulating an imaginary scheme of this nature we shall encounter numerous pitfalls, some of which are described below.

It is a mistake to suppose that a realistic scheme for a Staff Ride can be prepared after a few hours' work. We must remember that we are endeavouring by means of our general and special ideas to present the officers taking part in the exercise with at least some portion of the information that they would possess in real war. We cannot give them all the information, because we should have to write a book on the subject, and if we did that no one would read it. At the same time, there is no occasion to sacrifice instruction to brevity. The scheme for a Staff Ride is not like one for a field day or a Regimental Tour, where there is either very little time to read

it, or where it is only desired to produce a small tactical situation. Officers taking part in a Staff Ride expect to be given an opportunity of studying the application of the principles of strategy. The general and special ideas can be issued to them several days before the operations actually commence, and they will have plenty of time to read them, so they need not be very short; at the same time it is desirable to make them as short as possible, because officers do not care about reading long schemes.

If we take a situation from an actual campaign, and attempt to describe it to officers who have never heard of the campaign before, we shall find that a long account of the operations is necessary before they are in possession of sufficient information to enable them to formulate a definite plan of action. Exactly the same applies to an account of an imaginary campaign which is not taken from any particular example in history, but is evolved from the brain of the directing staff.

There is always a great deal of general information in the possession of officers taking part in a campaign, and this has a good deal of effect on the solution of any strategical or tactical problem. It is difficult to put much of this general information into a scheme for a peace exercise without making it unduly long, but it is desirable to recognise the most important items, so that we can introduce them if possible into our general and special ideas.

Perhaps the most important of all, and the one which is most generally neglected in peace time, but is very apparent in war, is what is called the *moral* of the troops. It has been proved conclusively in every campaign that a regiment of soldiers who believe that they are superior to the enemy, and capable of defeating a much larger force than themselves, and who have had practical experience of this during the campaign, are more than equal to twice their number of hostile troops. It is for this reason that every commander

in war is extremely anxious to gain some success, however small, at the very commencement of a campaign.

This feeling of elation or depression amongst the troops is very apparent to any man who has taken part in a campaign, and its effect on the solution of strategical, but still more of tactical, problems, is considerable. For example, in every operation of war the degree of success which may be anticipated is dependent to a great extent on the amount of risk which the commander is prepared to accept. No man knows before the first shot is fired, in any particular campaign or engagement, whether he is going to succeed or fail. The man who tries to be safe everywhere will certainly fail. The amount of risk a bolder man is likely to accept will depend chiefly on the reliance he can place in his own ability and determination and on that of the men under him. The natural conclusion is that if he himself, and the men under him, have great belief in their own powers, a greater degree of risk will be accepted, the operations will be more vigorous, the initiative will be seized, and the enemy will almost certainly discard his own plan of operations and conform to the movements of his opponent. The result being that, though in the first instance considerable risk was incurred, the danger is greatly reduced if the plan adopted is prosecuted with vigour and determination, until finally it disappears altogether.

It is difficult and hardly desirable to produce this feeling of elation on one side and despondency on the other during a peace exercise with troops, but it is apparent even at manœuvres when one side is constantly receiving adverse criticism and the other commendation. During a Staff Ride or a Regimental Tour the state of *moral* of the troops can only be produced by what is inserted in the scheme, or by umpiring; in any case it should be given due weight by the directing staff, so as to prevent officers from

doing things in a peace exercise which they would be unable to do in real war. For example, if it is proposed to practise the action of a rear-guard immediately after a defeat, the officer commanding who solved the problem on the assumption that all the troops were perfectly fresh and ready to do anything that was required of them, either in attack or defence, could hardly be praised for his methods. He would have paid no attention to the deficiency of *moral* amongst his men, and, having failed to realise the true state of the case, would receive no practical instruction, unless the error was clearly indicated by the directing staff.

Other points of general information that would be in possession of officers in a real campaign can be summarised as follows: The peculiar tactics of the enemy, the composition of his army, the efficiency of its training, including both officers and men, its resources in men and money and material. The attitude of neutral Powers, involving the necessity for making detachments. The enemy's vital points, such as his capital, his lines of communication and base, his railway, road, commercial or manufacturing centres. His national food-supply. His fortresses, their strength and the number (if any) of the field army required to garrison them. His system of government, and its probable effect on the action of the army. The resources of the country as regards available supplies, war material, &c., which would be useful to the invader. The control of the Press, and other matters which would apply in special cases. It would not be necessary to bring all these points into a scheme, but those which are most important, having regard to the class of operation it is proposed to practise, should be included in the general and special ideas.

Any operations in which we can possibly take part are so bound up with the question of naval supremacy that it

is desirable on occasion to practise the embarkation and disembarkation of troops and the capture or defence of a suitable base. On such occasions it has been ruled by our military authorities that the movements of transports and the subsequent operations on land should be carried out by officers of the Navy and Army working together. By this means alone can the military officers realise and help to overcome the naval difficulties at sea and during embarkation or disembarkation, and the naval officers understand and help to surmount the military difficulties which will arise on shore.

The general information which would be in possession of officers on both sides, if such an operation was carried out in real war, involves a mass of detail regarding the action of the opposing fleets which it is not easy to abbreviate, and a description of which usually produces a somewhat fanciful narrative. As the Army is not concerned with the methods employed by the Navy for gaining supremacy at sea, and as it is unlikely that any nation will accept more risks than those incurred by the Japanese in transporting troops to Korea in 1904, except perhaps for purposes of a raid, it is best to assume in the scheme that supremacy at sea has been obtained, and not to enter into the methods by which this state of affairs has been produced. If it is desired to lower the *moral* of the invaders, some of the transports can be sunk on their way to the enemy's country. If it is required to render the invader's sea communications insecure, then the fact must be stated, and the reason given in as few words as possible. It is preferable, however, to avoid such complications if possible, as the operations can be made sufficiently difficult without this addition.

CHAPTER IV

THE PREPARATION OF THE SCHEME—*continued*

EXAMPLES OF DETACHMENTS WHICH CAN FORM A BASE FOR THE SCHEME.—We have seen that the operations of large forces are unsuitable for the purposes of a Staff Ride, or even for peace manœuvres, so we are compelled to fall back on detachments which are made from the main army. If therefore we can formulate a list of such detachments which have been made in real war, and which are not open to serious objection from a strategical point of view, one of our chief difficulties in preparing a scheme will be overcome. With this object in view, the occasions when detachments are made and the reasons for making them are described below, together with an example of each.

There are many examples of all these various detachments, but it will be sufficient to quote only one or two for each different form of detachment. To facilitate description the detachments on each side are described as Red and Blue.

A.—A Red detachment made to threaten a Blue vital point and induce Blue to detach a still larger force, thus weakening his main army and enabling Red to concentrate superior force against it. For example, if Red has 200,000 men and Blue 230,000, and red by detaching 20,000 men can induce Blue to detach 60,000, the Red main army will then be superior in numbers to that of Blue.

This is the highest purpose to which a detachment can be put. It is a curious but very effective manner of

applying the first principle of war, the concentration of superior force at the decisive point. Detachments have been employed in this manner both at the commencement and during the progress of a campaign, but for the purposes of a Staff Ride it is better as a rule to model our scheme on the latter.

An example of such a detachment at the commencement of a campaign is afforded by the Germans in 1870, who while invading France by the lower Rhine sent small detachments to make a great demonstration on the upper Rhine, and thus induce the French to make a still larger detachment and weaken their main army. In this the Germans were entirely successful.

The Turks might have adopted a similar course in 1877, by detaching a force to the Dobrudja, and thus inducing the Russians to leave a large detachment on the left bank of the Danube and weaken their main army near Nikopolis.

Perhaps the best example of a detachment made for this purpose, after the commencement of a campaign, is afforded by the operations of the Confederate force under General Jackson in the Shenandoah valley in 1862, which would form suitable models for several Staff Rides. The reason for making this detachment was due chiefly to the physical features of Virginia. The Shenandoah valley, flanked by hills passable at only a few points, formed a covered way to the river Potomac at Harper's Ferry; this place was only fifty miles from Washington, which was vital to the Federals, and which was only open to attack on the left bank of the Potomac. The presence of a Confederate detachment in the Shenandoah valley induced the Federals to make a still larger detachment to guard their capital. The result was that the Federals were unable to concentrate a sufficiently superior force against the main Confederate army near Richmond, and when the Federal army did approach that town it was defeated.

Wellington's detachment under Hill to Ciudad Rodrigo, when he was about to advance against Marmont in 1810, was intended to keep Soult engaged in the south of Spain and prevent him from joining Marmont. The physical features of Spain and Portugal, as in Virginia, had an important bearing on the reasons for making this detachment; in fact, from this and other examples it appears that there should be some obstacle behind which the detachment can seek temporary safety in case of need.

To construct a scheme on this model it is necessary first to describe the action of the two main armies, then to discover some point which is vital to one of them, and finally to produce the two detachments. The locality of these detachments should be sufficiently far distant from the main armies to obviate any interference from the latter during the period of the Staff Ride.

For example, we will suppose that the Staff Ride is to be held in England, and that the locality selected is the country between Oxford and Gloucester. The scheme might take the following form (*see* Sketch No. 2). Wales, including Monmouthshire (Blue), is at war with England (Red), the Welsh capital being Brecon and the English capital being London. Blue, having a larger army than Red, invades England, but fails to dislodge Red from the Cotswold Hills. Blue, having command of the sea, then decides to contain Red on the line of the Severn, and seizes as a base the large and undefended commercial port of Newhaven, which is supposed to be suitable for the disembarkation of a large force. Blue intends to advance on London as soon as the whole army is assembled near Newhaven. Meanwhile Red has met this danger by moving south-east with his main army to cover London. In order to create a diversion and induce Blue to leave a larger force than necessary to cover Brecon, Red leaves a detachment at Oxford with orders to move on Tewkesbury and endeavour to gain the right bank of the

Severn. Blue detaches a larger force than Red to cover Brecon and gain a position on the Cotswold Hills.

The above is a very brief account of a possible scheme which would require careful elaboration before it could be utilised for a Staff Ride, especially as regards what part of it should be put into the general idea, and what into the special ideas for Blue and Red. The headquarters of the Blue Staff Ride could be at Gloucester or Tewkesbury, and that of the Red at Oxford or Chipping Norton. A number of variations of the scheme can be made so as to suit local requirements in any part of the world.

B.—A detachment made by a Blue force, acting on interior lines, with the object of delaying the advance of a stronger Red detachment, whilst the main Blue army concentrates superior force against another part of the Red army.

This situation usually arises as a consequence of one army operating on two or more lines, and frequently involves the action of somewhat larger detachments than are suitable for a small Staff Ride, for the sufficient reason that armies do not operate on two or more lines unless they are in strength on each, or unless one is a feint, and the latter method is considered under a different heading. When preparing such a scheme a good reason must be forthcoming to explain why one army is operating on two lines, otherwise false strategy is apt to be introduced. Several different reasons are afforded by history, and may be summarised as follows:

(1) When the army is too large to operate on one line and would be so strung out that the head of the army would be liable to defeat before the rear could come up. This was the case in 1870 when the Germans invaded France; *vide also* (2).

(2) When, owing to physical obstacles, a sufficiently wide front is not available for the army to advance on one

line. An example of this is afforded by the invasion of Bohemia in 1866 by the Prussians; *vide also* (4).

(3) Because, owing to the paucity of railways and roads, or their indifferent nature, it would be impracticable to supply the army with food, ammunition, &c., on one line, This occurred in 1904 with the Japanese in Manchuria.

(4) Because, owing to political reasons, one of which is the desire of the statesman to avert war so long as there is any hope of an amicable settlement, an army intended for invasion is dispersed, some time elapsing between the date of mobilisation and actual invasion, when it would be impracticable to concentrate without disclosing the intended line of operations. This was the case with the Prussians in 1866, and to some extent with the Allies in 1815.

(5) Because, when acting on the defensive, it may be considered necessary to guard more than one avenue of approach. For example, the Russians in 1904 divided their army into two, one force defending the line of advance from the Yalu over the Mo-tien-Ling Pass towards Liau Yang, and the other defending the approaches from the Liau Tung Peninsula. This was also the case to some extent with the Confederates in 1861.

(6) Because the army is furnished by two allied nations, each with its own base and with divergent lines of communication. This was the case in 1815 in Belgium, where the British base was at Antwerp, with a subsidiary base at Ostend, and where the Prussian line of communication ran eastwards through Liége.

(7) When one army is much stronger than the other, as was the case in 1862, where the Federals invaded the Confederate States on several lines. In this case, however, they were not strong enough at the decisive point, a battlefield in Virginia, and consequently failed to bring the Confederates to terms.

This is by no means a comprehensive summary of reasons for acting on more than one line, but it is sufficient for the immediate purpose, and it would be necessary to write several chapters on strategy to explain thoroughly all the reasons for such an operation. It should be remembered that a commander does not willingly operate on more than one line, and only adopts such a course when it is the lesser of two evils, and even then he is most anxious to concentrate his forces before the first important battle is fought, because until he is concentrated he is always liable to be defeated in detail.

It would be difficult to prepare a scheme on this basis, unless three divisions were the smallest force operating on one line, the enemy's containing force consisting of one or two divisions. The country selected for the Staff Ride should be suitable for the action of this containing force, otherwise it will be enveloped and driven back without any difficulty. It is usual to select an area with some physical obstacle intervening between the two forces, so as to give the containing force a better chance of holding its own.

Very careful umpiring will be necessary, and due weight must be given to the holding power of modern weapons. There is no occasion for the officer commanding the containing force to adopt a purely defensive attitude, because if he does he will soon be driven back. If, however, he takes advantage of any obstacles the invader must cross, or any locality where he must change the direction of his line of advance, an opportunity will almost invariably be afforded him of attacking a small part of the invader's force.

A scheme for a large Staff Ride in India, based on this idea, might be prepared on the following lines (*see* Sketch No. 3). Rajputana (Red) and the Punjab (Blue) are two allied States at war with the North West Provinces

(Green). The capital and base of the Red army is Jeypore, of the Blue army Lahore, and of the Green army Lucknow. The Red and Blue armies together are superior in numbers to the Green army. The Red and Blue plan of campaign is for the Blue main army, which is larger than that of Red, to invade the North West Provinces by Agra and Cawnpore, and advance on Lucknow. The Red army, which consists of two or three divisions and a cavalry brigade, is to advance by Delhi and join the main army at Agra, using the Sirsah railway as its line of supply, the Kurnal railway having been destroyed by Green. The Green army, which is superior to Red alone, is directed to advance *via* Agra and Bhurtpore on Jeypore, one division and a cavalry brigade being detached to Delhi with orders to seize the railway junction at Rewaree and delay the advance of the Blue army. The exact position of the opposing forces west of Delhi must then be given, together with all other details which are necessary, and which are described in the summary in Chapter VI.

C.—A detachment made with the object of deceiving the enemy as to the intentions of the General commanding the main army, especially when it is obvious that two or three distinctly different lines of operation are open to the latter.

A good example of this is afforded by Napoleon's advance to Ulm in 1805. He sent his cavalry under Murat, supported by part of Lannes' corps, through the Black Forest, to deceive the Austrian General Mack as to his true line of advance, and with the remainder of his army he moved round the left flank of his cavalry, gained Mack's line of retreat, and captured a great part of his army.

In the same manner Wellington, when contemplating an advance from Portugal into Spain, sent detachments to the neighbourhood of Ciudad Rodrigo and Badajoz, which

he had captured from the French. Having thus mystified the enemy as to which line he intended to employ, he suddenly issued from Ciudad Rodrigo, and eventually defeated Marmont at the battle of Salamanca, before that General was reinforced.

General Buller's movement towards Utrecht, at the end of May 1900, had a similar effect, because it induced the Boers to believe that his main advance was to be made on that side, and in consequence he surprised them when he appeared at Botha's Pass and turned them on the west.

A detachment of this nature is generally made when an invading army is about to traverse an obstacle, the obstacle favouring the operation of a small force, because its flank cannot easily be turned, or because it can find temporary safety behind the obstacle, according to the direction of the latter. Such a detachment is more suitable for a Staff Ride than B, because smaller forces can be employed.

We will suppose, for example, that a Staff Ride is to be held in India, in the neighbourhood of Quetta, where the scheme might take the following form (*see* Sketch No. 4). A Red army, assembled in the Pishin district, is opposing the advance of a southern army (Blue), based on Kurrachee. The southern commander sends forward a detachment up the Bolan Pass towards Quetta, to induce the enemy to concentrate his army on that side, but intends with his main army to advance by the Harnai route. The northern commander, uncertain as to which route will be selected by the Blue General, sends a detachment to watch or hold each, keeping his main army concentrated in Pishin. The operations of the two opposing detachments on the Bolan-Quetta side would form the scheme for the Staff Ride. Any fortification on either route should be considered as non-existent.

D.—A detachment made from the flank of the main army with the object of gaining the enemy's flank or rear,

and inducing him to retire from a very strong position which cannot be attacked with a reasonable prospect of success.

This is a wider movement than an ordinary flank attack, and usually takes several days to complete. The detachment would be so large, however, that it is hardly suitable for an ordinary Staff Ride—in fact, it has frequently happened that the main army has executed the flank movement, and the detachment has been left in front of the enemy's position, as at Laing's Nek in June 1900, when the 2nd division was left at Ingogo, in front of Laing's Nek, and General Buller's main force was moved round by Botha's Pass and Allemann's Nek, which were successfully carried.

Probably the best example of this form of detachment is afforded by Lee's operations against Pope, when the latter was holding a very strong position on the left bank of the river Rapidan. Lee knew that reinforcements would reach Pope shortly, and that any delay would mean that Pope, with greatly superior forces, would be able to attack and probably defeat him; so Lee decided, by threatening Pope's rear, to induce him to retire from his strong position and offer Lee a chance of attacking him in more favourable circumstances. Jackson was sent by a wide détour round Pope's western flank, while Lee kept Pope employed by demonstrations along the front. The manœuvre was successful, and a few days later Lee, having joined Jackson, defeated Pope at the second battle of Bull Run.

This is of course a very daring operation, and requires a determined commander to adopt it, and a still more determined subordinate to carry it through with any chance of success; but it would form a good scheme for a Staff Ride, one party of officers representing the detachment under Jackson, and the other party the detachment first sent by Pope to cover his line of retreat.

A modification of this idea is illustrated by Wellington's operations before the battle of Vittoria, where he sent Beresford's force through very difficult country to gain the French line of retreat on the Bayonne road and, by compelling the French to detach troops to that side, hoped to be able to attack them successfully in front. This manœuvre was completely successful, and the French were driven back to the Pyrenees with a loss of all their guns and transport.

If a scheme for a Staff Ride is to be founded on this idea, it is necessary to discover a position sufficiently strong to warrant the detachment round the flank, and such a position cannot be selected without a local knowledge of the ground. If the Staff Ride is to be held in England, a suitable position exists on the line of small hills on the left bank of the Severn between Gloucester and Tewkesbury (*see* Sketch No. 5). The scheme might then closely follow Lee's operations in 1862.

A Red force awaiting reinforcements from the south-west is covering the passages of the Severn between Gloucester and Tewkesbury, and has constructed several bridges. A Blue army advancing from the east finds this position too strong to attack with any chance of success, and the commander decides to despatch a detachment to effect a crossing north of Tewkesbury and compel the enemy to withdraw to guard his line of retreat, or at least to detach so many troops in that direction that an attack on his main position will become practicable.

This is a situation which would form a good scheme for a Staff Ride for the following reasons. The size of the detachment need not be very great, because when the Severn has been crossed the eastern flank of the Blue detachment, as it moves south, will be protected by the river, and as the Red reinforcements are coming from the south-west, and not from the west or north-west,

there would be no great danger of its being enveloped and cut off. The Red force would be compelled either to detach to its rear or else to attack to its front, and the latter course could be made impracticable by fortification.

The operations of the two detachments would thus form the scheme for the Staff Ride.

E.—A detachment made before an attack with the sole object of cutting off the enemy's line of retreat, pursuing him, or confining his retreat to one desired direction, whilst the main army attacks him and drives him back, unaided by the detachment.

This method is distinctly opposed to the first principle of war, the necessity for concentrating superior force at the decisive point, and when applied by a commander he has usually either moral or physical superiority over the enemy. It should be clearly understood, when such a detachment is made, that the remainder of the army must at once attack and drive back the enemy, for if there is any delay, the enemy is afforded an opportunity of defeating the detachment, as occurred at Nicholson's Nek in 1899; and furthermore, even if the enemy decides to retire without giving battle, he can attack the isolated detachment on his way.

It is a favourite method of dealing with savage or semi-civilised foes, because, owing to the moral superiority of highly disciplined troops, there is no fear of the main force being defeated, and it is unlikely that the attack of the main force will fail, or that the safety of the detachment will be seriously endangered.

The passage of the Douro by Wellington in 1809 affords a good example of this form of detachment, because owing to the direction of the rivers, and of the roads that Soult could retire by, Wellington was able to detach Beresford with 6000 infantry and 1000 cavalry to block Soult's line of retreat without exposing Beresford to serious

danger, whilst Wellington himself attacked Soult and drove him back.

This method of making war was the chief cause of the Federal failures in 1862-3. The Americans called it "anaconda strategy," because the Federals were always trying to surround the Confederates. They always failed because the essential adjunct, a determined and immediate attack in front, did not follow.

For example, at Chancellorsville Hooker sent nearly the whole of his cavalry to cut off the Confederate line of retreat, but instead of attacking the Confederates in a determined manner, he halted and occupied a defensive position at the critical moment. Then, having no cavalry, he was unable to gain any information as to what the Confederates were doing, whilst the latter under Lee, with all their cavalry, obtained ample information of Hooker's movements, and were able to surprise and defeat him.

So it appears that any scheme for a Staff Ride based on this idea must be prepared with due consideration of the dangers attaching to such an operation, and the main attack must be pushed home at once. Taking these points into consideration, it is not very suitable for a Staff Ride, unless one side is represented entirely by cavalry. Assuming that it is required to hold a Staff Ride in South Africa, in the neighbourhood of Bloemfontein, the scheme might take the following form (*see* Sketch No. 6)

A superior Red force, based on Colesberg, has driven back the Blue army, based on Pretoria, to the line of the Modder river about Glen Siding. The railway has been repaired between Colesberg and Bloemfontein, and Red has received information that it is in working order from Pretoria to Allemann's Siding, and that there is a large amount of rolling stock collected at Brandfort. The Red

Commander has decided to detach one division and one cavalry brigade to cross the Modder about twenty-two miles west of Glen siding, with orders to move on Brandfort, and cut off the Blue line of retreat, while he attacks the Blue force on the Modder river.

It would be necessary to form a small camp on the Modder for the Red side, and the Blue force, which would be composed entirely of cavalry guarding the west flank of the Blue army, could be represented by a party of officers having their headquarters at Brandfort, if suitable accommodation could be found there. The dates in the general and special ideas must be carefully worked out, to ensure that the move on Brandfort will take place the same day that the attack is made on the enemy's main position, and the main attack at Glen siding should be made against the enemy's western flank, though of course this part of the operation would not actually be conducted by the officers taking part in the Staff Ride.

F.—A detachment made in connection with the attack or defence of a fortress, to cover or raise a siege.

There are several examples in history of this form of detachment, and almost any one of them would furnish a good scheme for a Staff Ride, because a comparatively small detachment can be employed.

The actual attack and defence of a fortress cannot be practised during a Staff Ride unless the fortress is actually existing, with its permanent works, armament, garrison, &c.; if not, so much imagination is required that no valuable instruction is obtained. The existence of the fortress is not necessary, however, when it is desired to confine the operations to the action of a covering force opposing a hostile detachment which is endeavouring to raise the siege, because the locality of the permanent works will be at a distance from the actual scene of operations.

When preparing a scheme founded on this idea, the principles of strategy which apply to fortresses must be borne in mind. The ordinary situation which arises is that an advancing army encounters a fortress, detaches a force either to besiege or mask it, and continues on its way to deal with the enemy's main army. Then after one or more battles follows the usual pause which occurs in almost every campaign, when each side for some reason is compelled to halt, and when each commander is meditating some fresh move in order to get into a better position for defeating his enemy. This is the period when the defending army sends a detachment with the definite object of either raising the siege of the fortress in order to supply it with the means for a more prolonged defence in the future, or, by defeating the besieging force and raising the siege, of disturbing the safety of the enemy's line of supply and inducing him to detach a still stronger force to avert the danger, thus weakening his main army and affording a possible opportunity for successful attack.

The scheme for the Staff Ride in such a case would be based on the operations of the detachment covering the siege and the detachment sent to raise it, and the necessary details obtained from one of the following examples.

At the end of 1870 and beginning of 1871 a German detachment under von Werder was besieging Belfort, a French fortress on the southern flank of the German lines of communication from Paris to the Rhine (*see* Sketch No. 7). The French National Army was assembling on the Loire, and, in order to prevent any interference with the siege from that direction, a detachment from the besieging troops was despatched westwards. A large French force under General Bourbaki was sent by rail from the Loire to defeat this covering force, raise the siege of Belfort, and then strike north against the German lines of communication. The forces employed on this occasion

would be too large for a Staff Ride, but they could be reduced, without offending the principles of strategy, by slightly changing the French plan of operations and the existing conditions.

It would be assumed in the scheme that the French army was a regularly constituted force, and not a collection of hastily raised units deficient in training and discipline, as was actually the case. Instead of despatching the whole of Bourbaki's army towards Belfort, a detachment of one or two divisions and a cavalry brigade might be sent, with the object of endeavouring to raise the siege, but in any case to induce the Germans to detach troops from Paris to assist in covering the siege and guarding their lines of communication. The remainder of Bourbaki's army could then join Chanzy's army, and advancing against the Germans near Paris, endeavour to raise the siege of the capital. On the German side the force under von Werder could be represented by one division and some cavalry, covering the siege, and one division actually besieging the place.

Similar situations arose at Ladysmith and Kimberley, where the Boers detached troops to the south to cover the investment of those places, and were attacked by British detachments.

The advance of General Stackelberg's corps in June 1904 to relieve Port Arthur is hardly a good example either for a Staff Ride or to illustrate the particular form of detachment under consideration. The operation is universally condemned on strategical lines, because the Japanese Second Army, with command of the sea, by capturing the Nan Shan position on 27th May could contain the garrison of Port Arthur. The Japanese were not yet involved in the siege of the fortress, and consequently could make use of nearly their whole army to defeat Stackelberg, which they did on 14th–15th June at Tellissu.

After the battle of Salamanca in 1812 Marmont's defeated army retired on Burgos, whither Wellington, after occupying Madrid, followed them. He then laid siege to the castle of Burgos, the French falling back towards the Ebro; but he discovered that he was not strong enough to follow the French whilst the siege was on his hands, and after failing to carry the place by assault, he was compelled to retire owing to a concentration of superior numbers against him.

A parallel case occurred in 1877 at Kars. The Russians had defeated the Turks at Aladja Dagh and driven them back on Kars. The Russians then advanced on Kars and invested it, the defeated Turks retiring farther west. The Russians were unable to pass Kars and follow up the Turks, but, unlike Wellington, they succeeded in carrying the fortress by assault.

Either of these examples would form a suitable scheme for a Staff Ride, because on each occasion the defeated troops assisted by the fortress might have attacked the besieging troops, who must then either detach a covering force, or raise the siege and fight an enemy, under circumstances disadvantageous to themselves, with a hostile fortress close behind them.

We will suppose that a Staff Ride is to be held in the neighbourhood of York. The scheme might then take the following form (*see* Sketch No. 8). A Scottish army has invaded England through Cumberland, Westmorland, and West Yorkshire, has laid siege to the fortress of Carlisle, defeated the English army at a battle east of Lancaster, and is now holding the line Manchester–Leeds.

The railway bridge south of Annan has been destroyed by the English, but the Edinburgh–Newcastle–Northallerton railway, which was only slightly damaged, is in working order. Northallerton is a small English fortress, which is being besieged by two Scotch divisions, with the

chief object of gaining possession of the railway junction at that point. At present the Scottish army is being supplied by the Durham, Barnard Castle, Kirkby Stephen, Skipton railway, which is inadequate for its requirements.

The naval strength of each belligerent is insignificant, but the English have sufficient destroyers in their harbours to obviate the probability of any extensive movement of Scottish troops by sea.

The main English army is collected about Sheffield, and each side is organising for further operations. Information having been received at Sheffield that the garrison of Northallerton requires strengthening, the English commander decides to despatch one and a half infantry divisions and one cavalry brigade *via* Hull to raise the siege, reinforce the garrison, and then retire to the main army. The Staff Ride would then follow the operations of the Hull detachment and the troops besieging Northallerton, the latter of course being compelled to send a covering force to Thirsk or south-east of it.

G.—A detachment made with the object of protecting the lines of communication of an army and also of guarding its flank.

This situation can hardly arise unless the lines of communication run back diagonally to the front of the army, and when a battle is imminent. These conditions existed on the right of the Japanese army just before the battle of the Shaho at the beginning of October 1904, when Kuroki despatched a detachment to guard the right flank of the First Army and protect its line of communication through Penshihu.

A somewhat similar example is afforded by the much-criticised detachment sent by Wellington to Hal, immediately before the battle of Waterloo.

Unless the available information indicates pressing danger on the flank, such a detachment is strategically

unsound, because it means that the main army is weakened at the decisive point, the prospective battle-field, and the first principle of strategy is neglected. Even when danger is apparent, the detachment should be reduced to the smallest possible size, as was done by the Japanese in the example quoted above. The officer commanding such a detachment has a most difficult task to perform. He must guard both the flank of the army and the lines of communication. One of these duties ties him closely to the main army, and the other frequently draws him away from it. It is difficult for him to discover whether the enemy in front of him is in superior strength or not, and consequently whether he should adopt a defensive or offensive attitude. If the enemy is in small force, that force may be containing a larger detachment, part of which should be with the main army, where alone decisive results can be obtained.

We will suppose that a Staff Ride is to be held near Ladysmith in Natal, where a scheme based on this idea might take the following form (*see* Sketch No. 9). The Blue and White allied armies, originally inferior to Red, have been falling back in order to concentrate, and are now about to offer battle in a position facing south with their right flank resting on Wagon Hill. The Blue line of communication runs back through Van Reenen's Pass to Bloemfontein, and the White over Laing's Nek to Pretoria. The general plan of the allies is to await Red's attack, and for the Blue army, which is on the right, to adopt a defensive attitude, whilst the White army attacks Red when the latter is committed to an attack on Blue. The Blue commander decides to detach one infantry brigade with some artillery and cavalry to the neighbourhood of Besters (or any convenient spot south-west of it), to guard his right flank and his line of communications through Van Reenen's Pass.

The Red commander has decided to make his main attack against the allied left wing from the direction of Pieters and east of it, but three days before the battle despatches one and a half infantry brigades, two regiments of cavalry, and one brigade of field artillery to demonstrate against the allies' right and rear and induce them to detach troops in that direction. The Red detachment might be sent from Estcourt by Springfield towards Besters. The operations of the Red and Blue detachments would form the subject for the Staff Ride.

H.—A detachment made to guard the flank of an army, when advancing, retiring, or stationary.

As a rule such detachments are merely flank guards; they are tied to the main army, have little freedom of action, and consequently are unsuitable for a Staff Ride. Occasions occur, however, where, owing chiefly to the physical features of the theatre of war, these detachments are called upon to operate at some distance from the main army. When Wellington was advancing on Madrid, in 1812, after his victory at Salamanca, Hill was ordered to march from Badajoz, along the valley of the Tagus, and protect Wellington's southern flank from any interference by Soult. During this march Hill was completely severed from Wellington till the two forces converged on Madrid.

When the Russians crossed the Danube, at the end of June 1877, detachments were sent to the west to guard the right flank of the army against the Turkish troops at Widin, and others were sent to the east to protect the left flank of the army towards the river Lom (*see* Sketch No. 19). These detachments, especially the one sent to Plevna on the west, required so many reinforcements that the main army gradually disappeared and the invasion was brought to a standstill, only a small detachment being left to secure the passage of the Balkans to the south.

In November 1805 Napoleon, who had captured part of the Austrian army at Ulm, was advancing down the right bank of the Danube, driving back the remainder of the Austrians under Kutusoff, who was expecting to be reinforced shortly by a Russian army advancing from the north-east through Moravia (*see* Sketch No. 10).

There were only three bridges over the Danube in this part of its course, one at Lintz, another at Mautern, and the third at Vienna. Lintz to Mautern is 60 miles, and Mautern to Vienna 40 miles. On his arrival at Lintz Napoleon collected a flotilla of boats to enable him to cross the Danube if necessary, because, owing to the direction from which the Austrians were expecting the Russian reinforcements, it was possible that Kutusoff might cross at Mautern or Vienna and destroy the bridge behind him.

To protect this flotilla and also to cover the passage of his army, if necessary, Napoleon detached Mortier's corps to the left bank and directed him to keep a little behind the leading troops of the French army which was advancing on Vienna along the right bank. On arrival at Mautern, Kutusoff crossed to the left bank, Mortier's leading division attacked the Austrians, believing them to be merely a rear-guard, and the French division was practically annihilated; the remnants of Mortier's corps then recrossed to the right bank by means of the boats.

Of course, this was a dangerous detachment to make, but as the flotilla of boats was necessary and there was no means of transporting them on land, they required protection. If Mortier had been more careful he would not have allowed his leading division to enter a defile and be attacked in front, on the north flank, and in rear, which was what actually occurred. A similar situation might arise if a force was advancing along one bank of a river and was relying on that river for transportation of supplies. In either case the situation could be utilised for a Staff Ride.

The Austrian force must be reduced, as it is too big for a Staff Ride, but this could easily be done by sending a detachment to delay the advancing detachment and gain time for the Austrians to cross the river and get well away to join their reinforcements. Although Kutusoff defeated Mortier's detachment, the delay very nearly resulted in his army being defeated and cut off from the Russian reinforcements, and it would have been better strategy merely to delay Mortier's corps as suggested above.

A suitable locality for such a scheme could be found without difficulty in many parts of the Empire, and as it is not necessary for the detachment actually to cross the river during the period of the Staff Ride, there would be no objection to making use of a river smaller than the Danube, on the understanding that bridges only existed at the required points and that elsewhere it was unfordable.

I.—A detachment made solely with the object of guarding the lines of communication of an army, or some vital point at a distance from the main army such as the capital, a great railway centre, an important pass, or a sea base.

This is perhaps a more frequent source of detachments than any other. Sometimes the detachment is made for sufficient reason, but more frequently it violates the first principle of war, and is caused by the desire of the commander or the Government to be safe everywhere. If an army at the end of a long line of communications can win battles, the communications can look after themselves. If they are too carefully guarded, the army in front will not be strong enough to win a battle; it will be driven back, and the troops guarding the communications will be wasted. If, on the other hand, they are not guarded at all, the supplies necessary to keep the army alive will be at the mercy of the hostile inhabitants or of a hostile raid. It is the task of the commander to study these questions and

decide upon the minimum number that can be employed for this duty without undue risk.

At the beginning of May 1862 Jackson decided to move west from Swift Run Gap across the front of Banks' force, which was at Harrisonburg, and to defeat Fremont's troops who were threatening Staunton from the north-west (*see* Sketch No. 11). In order to safeguard his line of communication and of retreat on Richmond, he left a detachment under Ewell at Swift Run Gap. This detachment, owing to the physical features of the country, was fairly safe from attack by Banks, and, if Banks moved south on Staunton to cut off Jackson's retreat, Ewell would be on Banks' flank and rear. A scheme for a Staff Ride could be based on such an idea, provided it is assumed that Banks actually moved south on Staunton and detached a force to guard his flank against Ewell, Banks' and Ewell's detachments being represented by the two sides on the Staff Ride. The country selected for the exercise must contain some physical obstacles, either rivers or hills, to represent the Massanuttons and Blue Ridge mountains, otherwise the operations could not be practised.

In 1877, after the Russian main army had reached the Danube near Nikopolis, a detachment was left to guard the lines of communication near Galatz. This was a very vulnerable point, because it was known that a powerful Turkish force was in the neighbourhood of Shumla 150 miles to the south, and that Turkish detachments were just south of the Dobrudja. The only redeeming points for the Russians were the extraordinary supineness of the Turks, and the fact that the Danube, which is a formidable obstacle near Galatz, flowed between the Turks and the Russian road and rail communications, which ran through that town. A vigorous offensive by a Turkish detachment from Shumla against a Russian detachment in the Dobrudja would form a good scheme for a Staff Ride.

In 1862 Federal detachments were sent to the Shenandoah valley to guard the capital by covering Harper's Ferry. Several different schemes based on this idea could be prepared by any officer who was conversant with the details of the campaign.

In 1904 Japanese detachments were left at Wiju and other places along the line of communication of Kuroki's army with Korea, all of them exposed to a Cossack raid from the north.

Speaking generally, the best form for a scheme based on this idea is to produce a line of communication with one or two exceptionally vulnerable points like Staunton, Galatz, Wiju, &c., place a flying column to protect the line, and then make a raid against it, either with all arms, as might be the case in the first two examples, or with cavalry and horse artillery, as might have been done in the last.

We will suppose that the Staff Ride is to be held near Banbury, where there is some good ground for the operations of a small force (*see* Sketch No. 12).

The 52nd degree of latitude is the frontier line between Red on the north and Blue on the south.

The Red capital is Manchester, and the Blue capital is Winchester. London is unfortified, and is the largest commercial town in the Blue kingdom. The Thames is a river 100 to 300 yards wide. The Red army, superior in numbers to Blue, has advanced from the line Northampton–Cambridge to the line Maidenhead–London, and is about to cross the Thames, but is delayed by a lack of bridging material. All the railways in Blue land on the left bank of the Thames have been destroyed, together with all the bridges at and below Oxford.

The Blue army offered very slight resistance north of the Thames, but is believed to be concentrating somewhere near Reading.

The Red commander is anxious for the safety of his line of communication through Northampton, and has detached one division and two regiments of cavalry to the right bank of the Cherwell at Banbury, to guard that flank.

The Blue army is concentrating on the line Wokingham–Farnborough, with the object of attacking the Red army when in the act of crossing the Thames. The Blue commander, hearing of the Red detachment at Banbury, realises the fact that Red is over-anxious regarding the safety of his line of communications, and decides to increase his anxiety and induce Red to detach more troops in that direction by sending one and a half divisions and one cavalry brigade along the right bank of the Thames and Cherwell rivers to Banbury, this detachment is to cross the Cherwell at Banbury and raid Red's line of communications.

The officers on the Red side could stay at Banbury, and those on the Blue side at Oxford.

J.—A detachment made with the object of attacking the enemy in rear, whilst the remainder of the force attacks the enemy in front

This is a favourite manœuvre when dealing with savage or semi-civilised foes, because, owing to the superior *moral* of the troops, there is not much danger of the detachment being cut off or defeated. In war between civilised nations, where the *moral* of the troops on one side is much the same as that on the other, it is a dangerous operation, only resorted to for some special reason, such as to force the passage of a defile.

In July 1877, immediately after the Russians had crossed the Danube, their advance guard, under General Gourko, composed of 8000 infantry, 4000 cavalry, and 32 guns, was sent forward to gain possession of one of the passes over the Balkans (*see* Sketches Nos. 13 and

19). Gourko discovered that the Shipka Pass was strongly held by the Turks, but that a footpath existed 21 miles to the east, called the Hankioi Pass, which was undefended. Leaving a detachment, which was subsequently reinforced from the main body, to attack the Shipka Pass from the north, he crossed the Balkans with the remainder of his advanced guard, intending that a simultaneous attack should be made on the Shipka Pass from the north and the south at daylight on July 17. The attack from the north was delivered as arranged, but failed. Gourko himself was delayed by the Turks, and could not attack from the south till the 18th, when his attack also failed. Next day the Turks dispersed, and the pass was captured without further fighting. If a scheme for a Staff Ride is based on this idea, the officers representing the Turkish side should be given the detachment which was driven back by Gourko at the south end of the Hankioi Pass and the detachment at Kazanlik, and also, if considered necessary, the detachment holding the summit of the Shipka Pass. It would make a better scheme for a single Staff Ride than for one where each side is represented by a party of officers.

The battle of Jena in 1806 affords an example of a similar detachment, though it was ordered by Napoleon owing to a misconception of the enemy's position and intention (*see* Sketch No. 14). Early on October 14, 1806, Napoleon had assembled nearly the whole of his army at Jena, and believed that the whole Prussian army was in front of him. He ordered the two corps on his right, one to Dornberg, and the other under Davoust from Naumburg, to Apolda, to fall upon the Prussian rear, whilst he attacked in front. The result was that Napoleon defeated the Prussians near Jena, but their main army was marching straight on Davoust, who succeeded in holding his ground near Auerstadt, repulsed the consecutive attacks

made by the Prussian divisions as they arrived on the ground, and finally, assuming the offensive, completely defeated them.

This form of detachment is best suited for an exercise in mountain warfare against tribesmen, or else merely as part of an enveloping movement made against the flank of an enemy's position, like the Russian advance under Rennenkampf against the Japanese right rear at the battle of Sha-ho, or like Jackson's movement round Hooker's right flank and rear at the battle of Chancellorsville, where Jackson was mortally wounded. Other examples of this form of detachment can frequently be found when studying the attack and defence of a range of mountains like the Pyrenees, and sometimes when the line of a river has to be forced.

K.—A detachment made with the object of blocking a defile.

Wherever there is a defile there must necessarily be an obstacle on either side of it, usually a range of mountains or a river. Strategy teaches us that the best way to defend such an obstacle, if we cannot get it well behind us, is to watch or hold lightly all the avenues of approach, keep the main army concentrated in rear, and when the enemy's main line of advance is disclosed to attack him before his army is clear of the defile. This is no doubt quite sound in theory, but human nature enters largely into the solution of problems in war, and when we go to military history we generally find that strong detachments are sent forward actually to defend the defile itself, especially when it is formed by a range of hills, just as the Russians did in 1904. When the defiles are merely watched, the main army does not always arrive in time to attack the enemy issuing from the defile, as occurred with the Austrians in 1866. If a suitable defile can be found, this form of detachment, coupled with one of the others already dis-

cussed, would form an interesting scheme for a Staff Ride, especially if it was desired to exercise the officers on one side in the selection of defensive positions in a defile, and on the other side in the attack on such a position. For the purpose of the exercise the attack might succeed, and the defenders when driven back, might be given some reinforcement, and then themselves attack from the other side, as occurred at the Mo-tien-Ling, which was captured by the Japanese on June 27, 1904, and unsuccessfully attacked by the Russians under Count Keller on July 17. There are many examples in history of this type of detachment: in the Pyrenees in 1813, in the Bohemian mountains in 1866, the Balkans in 1877, the Boer War 1900–1, and during the advance of the First Japanese Army from the Yalu to Liaou Yang in 1904. Nachod and Trautenau in 1866 are familiar to most officers, and either would form a suitable basis for a small Staff Ride, the detachment on the Prussian side being supplied by the advanced guard, with the main body strung out on a bad road in rear, and the dates being carefully arranged so that the opposing detachments reach the exit from the defile about the same time, which was what actually occurred in 1866. As in the last example, the Prussian detachment might gain the exit and hold it, and on the second day the Austrian detachment might attack the Prussians. A local knowledge of ground is necessary to select a suitable defile, but many can be found in the United Kingdom or in almost any colony or dependency of the Empire.

L.—A detachment made to the front or the flank of an army to cover the crossing of a difficult obstacle, or to cover a change of direction.

This is the moment when a commander in modern war, with an inferior army, may hope to attack and defeat his enemy in detail. He will not attack with a detachment, but with his whole army, so the idea is not suitable for an

ordinary Staff Ride, but could be utilised for a single Staff Ride. A great many schemes based on the idea of sending forward a detachment in front or on the flank of the army have been worked out during Staff Rides in England, but it should be remembered that such a detachment, unless there is good reason for it, is absolutely opposed to the principles of strategy and may lead to defeat in detail, as already explained in Chapter III, p. 46. When, however, an army is advancing, and it is necessary for it to cross an obstacle or change direction, such detachments are absolutely necessary, and the commander can only hope that he will not be heavily attacked before the operation is completed. It is surprising what a number of opportunities for offensive action have been neglected when this situation has arisen.

In 1866 the Austrians, with better arrangements, might have attacked and defeated the Crown Prince's army issuing from the Trautenau, Eipel, and Nachod passes before the remainder of the Prussian army could have come to its assistance.

In 1870 the German Third Army, when changing direction to the west after the battle of Weissenburg, exposed the Vth Corps to attack by a superior French force under MacMahon. Similarly the First and Second German Armies after the battle of Spicheren, when changing direction to the west, and later on after crossing the Moselle, exposed their flank troops to an attack by superior hostile troops.

The Russians when crossing the Danube in 1877 might also have been attacked by the Turks, if the latter had made any attempt to concentrate and assume the offensive.

In 1904 the Russians might have attacked the First Japanese Army when it was issuing from the mountain defiles east of the Liaou Yang valley.

On all these occasions, and on many others, favourable

opportunities have occurred for an inferior defending force to attack the invader with a fair chance of success.

In 1809 Napoleon after occupying Vienna decided to cross to the left bank of the Danube and attack the Austrian army under the Archduke Charles. He selected the island of Lobau as the point of passage, and seized the villages of Essling and Aspern to cover the crossing. The Austrian army was concentrated twelve miles farther up the river, and the Archduke immediately advanced and attacked the French while they were crossing. The battle lasted two days, and though Napoleon held the villages and was constantly being reinforced from the right bank of the Danube, he suffered his first defeat, and was driven back to the island of Lobau with a loss of over 30,000 men.

As it would be undesirable to employ such large forces on a Staff Ride, and as it would be difficult to reduce the numbers on each side without creating a somewhat unreal situation, this form of detachment does not appear to meet our requirements, though for a large Staff Ride it might afford an instructive situation.

M.—A detachment made with the object of raiding the enemy's line of communication, either to obtain information as to his movements, to destroy an important railway or magazine, or to induce him to detach troops from his main army to protect his line of supply.

This is a form of detachment which could be usefully employed in conjunction with I. above, the raiding force being composed of cavalry and some horse artillery, represented on the Staff Ride by officers belonging to those arms.

In June 1862 General Stuart, with 1200 Confederate horsemen and a section of artillery, rode right round the Federal army, destroyed a large amount of military stores, burnt a railway bridge, gained the most valuable informa-

tion as to McClellan's dispositions, increased the *moral* of the Confederate army, and only lost one man.

It is interesting to consider what would have been the effect on the Boer forces if, towards the end of 1899, a similar raid had been made by a British mounted force from the neighbourhood of Orange River Station to Bloemfontein, and then south-east to Aliwal North.

Similar raids by much smaller forces were made by the Germans at the very commencement of the 1870 campaign, and there is no doubt that they had a demoralising effect on the French, and gained some useful information.

On January 8, 1905, General Mishchenko, with about 6000 cavalry and six batteries of horse artillery, crossed the Hun and raided the Japanese line of communications, destroyed a quarter of a mile of the railway near Haicheng, attacked Old Niuchwang, and then retired.

During the South African War there were numerous examples of raids made by all arms against our lines of communication, most of which would provide suitable schemes for a Staff Ride in any part of the Empire. When drawing up the scheme, the main army on each side must first be placed in suitable positions at a sufficient distance from the proposed scene of operations. A reason should be given for a pause in the operations of the main armies, and a vulnerable place selected on the lines of communication of one of them. This place can then be defended by a few troops permanently allotted for its garrison, and a flying column introduced for the general protection of that part of the line. The officers on one side can conduct the operations of the flying column, and those on the other side carry out the raid made against the selected vulnerable point. In a scheme of this nature the hostility or friendliness of the inhabitants is an important factor. Thus in 1870 the French inhabitants

were actively hostile, and caused great trouble to the German lines of communication.

On the occasion of Stuart's raid the inhabitants were friendly; with Mishchenko's raid they were practically neutral. During the South African War the inhabitants were mostly hostile, or, what is much worse, they appeared to be friendly and were actually the reverse.

N.—A detachment made to collect cattle or supplies, to prevent the enemy from using a certain area as a source of supply, to intimidate a troublesome population, or to quell a local rising.

Numerous examples of detachments made with the above objects occur in a campaign where the invader has to deal with an enemy who adopts guerilla tactics, such as during the Peninsular War, in India, and in South Africa. Examples also occur in the latter part of the Franco-German war, when the whole manhood of France took up arms against the invader.

When preparing a scheme based on this idea the course to be followed is very much the same as that recommended under M. Small forces can be employed, even down to a few companies of infantry on one side and a somewhat larger mixed force on the other. The smaller force should be given some haven where it can find temporary safety if required, such as a post on the lines of communication, or some local town or village which has been fortified by the inhabitants.

O.—A detachment made towards another detachment to secure the junction of the latter with the main army.

In May 1862, when Jackson was operating in the Shenandoah valley, there were two such detachments on the Confederate side, one under Anderson at Fredericksburg, and the other south-west of Warrenton. Opposing Anderson was a superior Federal detachment partly covering Washington on the south, partly intended to join in

the concentric movement on Richmond. Abercrombie at Warrenton was also protecting Washington on the south-west and maintaining communication with Banks in the Shenandoah valley. Abercrombie's detachment at Warrenton would form a good scheme for a Staff Ride. He had about 4000 infantry and a few cavalry and guns; his right flank was secured by General Banks in the Shenandoah valley, and his left by McDowell opposite Fredericksburg. When Jackson moved west against Fremont's troops and Ewell was left on Banks' flank, an advance by Abercrombie would have produced interesting results. The Confederate detachment south-west of Warrenton could not have been greatly reinforced by Ewell at Swift Run Gap, because he had as much as he could do to look after Banks. The scheme given below is based chiefly on this situation. In any campaign where the army is operating on a wide front, detachments of this nature will be found, in 1870, 1877, 1900, and 1904–5. They are also of common occurrence in warfare against mountain tribes or guerillas.

We will suppose that the Staff Ride is to be held in India in the neighbourhood of Bangalore (*see* Sketch No. 16).

Blue, with command of the sea and with superior military power and resources, is at war with Red. The frontier between the two countries is represented by a straight line drawn through Chengalput and Kolar. The Blue capital is Chitoor, and the red capital Trichinopoly.

Blue advanced against Red, but was defeated at the battle of Tripatoor, and retired on Chitoor. After reorganising their army and sending detachments towards Tripatoor and Bangalore to guard the two approaches to Chitoor, east and west of the eastern Ghauts, Blue embarked a large army at Madras, seized a base at Negapatam, and

commenced to land there with the intention of advancing on the Red capital, Trichinopoly.

Meanwhile Red, leaving a detachment at Tripatoor, had moved the main army to Trichinopoly, and had sent a force to the west side of the eastern Ghauts to threaten the Blue capital *via* the Bangalore–Kolar road. This Red force advancing by the Salem–Seringapatam road is west of Kolaigul, operating against a superior Blue detachment.

The Red detachment at Tripatoor consists of one infantry brigade, one artillery brigade, one regiment of cavalry, and one company of sappers and miners. Its orders are to protect the north flank of the Kolaigul detachment and ensure the safety of the latter's communications with the main army at Trichinopoly. The Blue detachment north of Tripatoor consists of one and a half infantry brigades, one brigade of artillery, one squadron of cavalry, and two companies of mounted infantry; its orders are to advance south and threaten the rear of the Kolaigul detachment, and assist the Blue detachment from Seringapatam in driving it east of the Ghauts.

This of course is only the bare skeleton of the scheme, which requires elaboration and arrangement. If the country south of Tripatoor is not suitable for a Staff Ride, the scheme must be altered so that the operations may take place over a more suitable area, but the general idea can remain much the same. Local knowledge of the ground is necessary before the locality for the operations can be definitely fixed.

If the ground between Bangalore and Seringapatam is found to be more suitable, the same general idea could be used, and the operations of the detachments under Banks and Jackson could form the scheme for the Staff Ride. It is interesting to note that there is a marked similarity between the direction of the railways in this part of India

and in Virginia, also between the eastern Ghauts in India and the Blue Ridge Mountains in America.

P.—A detachment made either with the object of effecting a landing at one point on an enemy's coast-line, and thus diverting his attention from the point where the main landing is intended to take place, to secure a base for the landing of the main army, or to make a raid against some vital point.

Probably the best example of this form of detachment is afforded by Lord Wolseley's invasion of Egypt in 1882. He engaged Arabi's attention by landing at Alexandria a force which had orders to demonstrate against the Egyptian army to the south. On the arrival of the transports containing the main expedition Lord Wolseley sailed to Aboukir Bay and bombarded the forts there, as though he was about to land. Finally he passed rapidly through the Suez Canal to Ismailia, thus securing a suitable base and protecting the Suez Canal.

This type of detachment has frequently been selected to form a scheme for a Staff Ride in England, probably because it overcomes the difficulty of landing a sufficiently small hostile force. It is, however, open to some objection from the point of view of modern war. In countries where railways are few or non-existent, like Korea, the Liaou Tung Peninsula, Egypt, Turkey, China, &c., if the defender has no troops on the spot, he must either neglect the hostile landing altogether, or move slowly to meet it. When the invader discovers that the defenders have actually moved in the required direction, the main landing can take place, and the detachment having done its work, possibly without firing a shot, will still have time to disembark before the defender's troops arrive.

In a country where many railways exist, and where the defender can move troops rapidly to oppose a landing at any point, it is doubtful whether a small detachment can

compass anything more than its own destruction, especially if opposed by energetic troops armed with modern weapons.

It is sometimes urged that the detachment can re-embark, just as Sir John Moore's army did at Corunna in January 1809, or as part of the British detachment did at Alexandria in 1882; but in the first case the embarkation was covered by the Spaniards who held the defences of Corunna, and in the second case by the garrison left at Alexandria. If, under modern conditions of war, the invading detachment is attacked, and desires to re-embark, it is unlikely to be able to do so without losing a great part of its force. It may also be observed that when the landing takes place in a thickly populated country with extensive telegraphic communication, the strength of the force actually disembarked will be ascertained rapidly by the defender, he is unlikely to be deceived thereby, and any troops sent to repel the invading detachment, having performed their task, can rejoin the main army before their absence will be felt.

Another type of detachment of a somewhat similar nature is the much-discussed raid, which has frequently provided a scheme for a Staff Ride in England. In this case a foreign Power is supposed to have landed a force of 5000 to 10,000 men with the object of capturing London. This possibility has been discussed so frequently in the public press, and has led to such antagonistic conclusions, that the subject cannot be investigated here with sufficient brevity, and it is best to say that those authorities who believe such an operation is possible are justified in practising it, and those who do not believe in it can with advantage choose another form of detachment.

A more likely detachment than a raid on London is one made with the object of securing and fortifying a base for the landing of the main army. If one nation proposes to fight another on land, and the two are separated by the

sea, as was the case in 1904 with Russia and Japan, it is sometimes necessary for the invader to send forward a detachment to secure a landing-place before the main army is embarked. This is what the Japanese did at Chemulpo.

There are occasions, however, when the whole army is sent across the sea with the intention of landing at some undefended spot, and if that is found impracticable, to select another one. This is what occurred in 1854, when the Allied Army embarked at Varna and sailed for the Crimea; and in 1904, when the Second Japanese Army under General Oku landed at Pitszewo.

The landing and subsequent operations of an advanced guard sent forward to secure a base, forms an instructive exercise for officers of the Army and Navy working together. When preparing the scheme, a suitable landing place should be reconnoitred beforehand by the director, and the commercial port which is to act as the base should be decided upon. The immediate capture of this port will depend upon whether it is fortified or not, and the scheme should include some information on the subject.

For example, if it is desired to hold a Staff Ride near Cape Town, the scheme based on this idea might take the following form *see* Sketch No. 17).

England, Blue, is at war with Cape Colony, Red.

Blue, having gained command of the sea, decides to land two infantry divisions and a cavalry brigade about Hawston, in False Bay, and seize Cape Town, which is believed to be weakly defended, and which is required by Blue as a base for further operations inland.

The Red capital is Middelburg, and the main Red army is believed to be concentrated near the capital ready to move towards any threatened point. Port Elizabeth, Port Alfred, and East London are each supposed to be defended by a few guns on the sea front, but there are no permanent defences at Cape Town.

The Red garrison at Cape Town consists of one infantry

division and one regiment of cavalry. Sufficient rolling stock has been collected at Cape Town to transport this force to Middelburg or any other required point on the railway.

On the Blue side a party of naval and military officers would make all the necessary arrangements for transporting their troops from England to Hawston, and for landing on arrival. The operations inland would include an advance on Cape Town, opposed by another party of officers representing the Red force. The Red officers could stay at Cape Town, and the Blue officers at Caledon, if accommodation is available.

Q.—A detachment pushed forward in front of an army to secure an important strategical point, such as a mountain pass, or to defend a supply depôt.

Such a detachment cannot be made with safety in any ordinary theatre of war. In fact, it should only be employed in a country where there are no railways, few roads, and where the enemy is unlikely to be able to concentrate a superior force against it, or where it is quite impossible for the army to advance until supply depôts have been established in front of it. This would be the case in some parts of the borders of India, in China, or in Lower Egypt.

In 1882 Lord Wolseley was compelled to send forward a detachment to Kassassin, not only to hold the Canal lock at that place and prevent the Egyptians from cutting off the fresh water-supply, but also to establish a magazine. This detachment was twice attacked by the Egyptians, who were each time repulsed. It had to hold its position for a long time, and it was necessary to employ very few troops, otherwise the supplies would have been consumed as fast as they were sent out, and the main army could not advance until sufficient food had been collected there to enable it to advance on Cairo.

In mountain warfare it is sometimes necessary to send

forward a detachment to hold an important pass or to forestall the enemy at such a place.

In 1898, when Lord Kitchener was advancing on Khartoum, it was necessary to establish magazines in advance of the main army, and not bring up the whole force till everything was ready for a decisive blow.

On all these occasions the reasons for making these detachments, and their safety, is to be found in the absence of any rapid means of transporting either troops or supplies, each belligerent being affected in an equal degree. If a detachment is sent forward in front of an army in an ordinary theatre of war, it is almost certain to be overwhelmed. Thus, the formation of a great supply depôt at De Aar in 1899 was no doubt highly desirable from a military point of view, but it was a dangerous undertaking, and against a more enterprising enemy than were the Boers at that period of the campaign would have offered a far more tempting bait than Kimberley or Mafeking.

If it is desired to base a scheme for a Staff Ride on this idea the above points should be considered, and a detachment should not be sent forward in front of an army unless the conditions here mentioned are present. The scheme might be drawn up on the following lines.

Disturbances have occurred in a native state which is subject to British control. In order to send an expedition to quell the rising, it is necessary to traverse an inhospitable region extending for sixty miles, with no supplies except grazing, few inhabitants, and bad roads. The size of the expeditionary force has been reduced to the lowest possible degree, but it has been found that no advance can be made until a magazine has been established, protected by a small detachment, on the borders of the state. With this object in view, a detachment, consisting of one infantry brigade, one artillery brigade, one regiment of cavalry, and one company of engineers, is despatched with the first convoy of waggons to establish posts along the line of

communication and defend the supply depôt which is to be established at the end of it. It is calculated that it will take three weeks to forward sufficient supplies for the whole force to operate with freedom against the enemy. Grazing is to be found in most places, but grain for the horses must be carried.

The officers taking part in the Staff Ride could work out all the necessary details of supply and defence for the whole line, including the amount of transport required, the method of passing supplies up the line, the number of posts on the line, &c. Information must of course be given as to the size and composition of the whole force, the position of the nearest railway station, the nature of the enemy's country and his method of fighting, &c.

It is undesirable, under these circumstances, for a party of officers to represent the enemy as they gain no valuable instruction; so the operations of the native forces must be decided from day to day by the director of the Staff Ride. After the officers have decided upon the locality and defence of the magazine, the director can give them a situation involving an attack by the enemy, and they can draw up a plan for repelling it. This class of exercise is particularly suitable for practising staff officers in the solution of important administrative questions.

R.—A detachment which has been employed on one of the duties enumerated in the above seventeen different types, and which is required to rejoin the main army.

An instructive scheme, involving considerable freedom of action on the part of the commander, can be based on this idea. Military history affords us examples of detachments that have failed, even when unopposed, and of others that have succeeded in reaching the main body in time to take part in the decisive battle. Success on these occasions has resulted more from the determination and energy displayed by the commander than from the fighting qualities of the troops.

After the battle of Ligny in 1815, Napoleon ordered Grouchy to follow up the retreating Prussians, and keep them employed whilst he himself attacked the English army under Wellington. Grouchy, however, not only failed to prevent Blucher joining the English army, but was himself absent from the field of Waterloo. Blucher, on the other hand, in spite of being engaged with Grouchy at Wavre, came up on Napoleon's right flank at the critical moment of the battle, and ensured the defeat of the French.

In 1861 Johnstone was operating in the Shenandoah valley against a superior force of Federals under Patterson, but he succeeded in deceiving Patterson as to his real intentions, and joined Beauregard at the battle of Bull Run in time to prevent almost certain defeat.

It is not difficult to prepare a scheme based on this idea. It is only necessary to place the two main armies in a convenient position, to assume that Red is about to take the offensive, and requires every man on the battle-field, and then to recall a detachment which has been carrying out one of the duties enumerated in this chapter. For example, if the Staff Ride is to be held in Ireland in the neighbourhood of Clonmel (*see* Sketch No. 15), the Munster army (Red), based on their capital, Tralee, having invaded Leinster (Blue), on the line Charleville–Tipperary–Thurles, towards the Blue capital, Maryborough, was defeated near Durrow, and compelled to fall back on Kilmallock, destroying all railway bridges between Ballybrophy Junction and Thurles.

The Red commander when retiring through Thurles detached one division and a cavalry brigade to Caher with the following objects:

(*a*) To deceive the enemy as to his main line of retreat.

(*b*) To induce the enemy to detach a larger force, not only to guard his southern flank, but to prevent any Red advance *via* Kilkenny on the capital, Maryborough.

(*c*) To suddenly call in the Caher detachment and assume the offensive against the weakened Blue army.

The Blue army followed Red as far as Tipperary, and the opposing cavalry are in contact on the line Hospital–Ballylanders, the pass over the Galtee mountains to Mitchelstown being held by a Red detachment. This position has been occupied without any important change for ten days. Meanwhile the Red detachment at Caher attacked and defeated a Blue detachment near Newinn. Blue was then reinforced, and advanced against Caher in greatly superior numbers. Red held its position near Caher for two days, but the Blue cavalry having succeeded in occupying Clogheen, a retreat became necessary. The officer commanding the Red detachment was then ordered to march to Ballylanders to join the main army, which was advancing to attack Blue near Tipperary.

The officers on the Red side would conduct the operations of the Red detachment from Caher to Ballylanders, and those on the Blue side the operations of a superior Blue detachment. The dates and exact distribution of the troops at the commencement of the Staff Ride must be carefully worked out. The officers on the Red side could stay at Fermoy or Mitchelstown, and those on the Blue side at Clonmel. This scheme is worked out in detail in Chapter V. as an example of how the general and special ideas can be prepared.

All the above examples have been taken from well-known campaigns, the history of which every staff officer is fully acquainted with. As already stated, this is not an exhaustive statement of the reasons why detachments have been made in war, but it is sufficient to indicate the general lines on which schemes for these exercises can be framed. Officers can then prepare similar schemes based on somewhat different ideas which they have obtained from their study of other campaigns and from their own experience of war.

It will generally be found that campaigns such as the

Peninsular War, especially on the French side, the operations in the western theatre of war in America in 1861–2, the latter part of the 1870 war, the South African campaign, and many of our small wars, are not very suitable for providing schemes for a Staff Ride where it is intended that each side should be represented by a party of officers. The reason for this is that the troops on one side usually consist either of untrained soldiers, guerillas, semi-civilised or uncivilised inhabitants, and tribesmen. Such campaigns, however, afford excellent examples of schemes where it is intended to employ only one party of officers, and where the operations of the enemy are conducted by the umpires. These campaigns are peculiarly fruitful of detachments; many officers have had personal experience of such fighting, and we are more likely to be employed in such work than in more regular operations of war. The method of preparing schemes for this class of exercise, and a system of conducting them, is explained in Chapter IX. and X.

It is desirable to indicate a few erroneous ideas which sometimes appear in the schemes prepared for a Staff Ride. When it is intended to practise movements of troops by sea, disembarkations, &c., it is best to assume that the country where the landing is to take place belongs to some other nation than ourselves. If the scheme involves any movement of troops by sea, even such an operation as McClellan's move from Alexander to the York Town Peninsula in 1862, or the Allied Army from Varna to the Crimea in 1854, the side making the move should be given command of the sea, and no details entered into as to how that state of affairs has been brought about. If, on the other hand, an invasion of England forms part of the scheme, we find all kinds of undesirable reasons given to show that such an operation is possible, such as the British Fleet being drawn away to protect trade-routes or to follow a few hostile cruisers, &c. There can be only one

sound reason, and that is the destruction of the Fleet, which it is unnecessary and undesirable to contemplate.

The unreadiness of the army on one side is frequently given as the reason for making a detachment. In these days of rapid mobilisation, with the network of railways and telegraphs spread over every country possessing a large standing army, no powerful nation that is likely to threaten the integrity of our Empire can be expected to be behindhand in her preparation for war. If, however, it is desired to practise operations against a country with no standing army, or whose military centres are far removed from the probable theatre of war, as was the case with Russia in 1904, then the fact and the reason should be clearly stated.

It is sometimes stated in a scheme that a magazine or railway centre in front of the army has to be protected by a mobile defending detachment and is attacked by an invading detachment, these two detachments having a little campaign of their own, while doubtful reasons are given why the main armies on each side are unable to advance. It is essentially a civilian idea that because a nation possesses and pays for an army, that army must always be, like the local policeman, ready to protect individual interests and local towns. If small detachments are to be scattered about the country protecting railway centres and magazines, the main army will be reduced to impotence; it will be defeated, and then the railway centres and magazines will be of no use to any one except the invader. A study of Von Moltke's strategy, which is superior to Napoleon's in this respect, will show the folly of guarding every point which may be considered for the moment to be vital. The one vital point in war is the enemy's army and the battle-field, and though detachments, as already shown, are necessary and useful, the first principle of war must always be aimed at—the concentration of superior force at the decisive point.

CHAPTER V

THE PREPARATION OF THE SCHEME
(continued.)

THE ELABORATION OF THE GENERAL AND SPECIAL IDEAS.—Perhaps the best method of describing the various steps that it is necessary to take when drawing up the general and special ideas for a Staff Ride is to formulate a definite scheme and study the various requirements which would apply, with slight modification, to other localities andother schemes.

We will assume, therefore, that the Staff Ride is to be held with the object of instructing commanders and staff officers in the south of Ireland, that it is intended to practise the operations of a detachment which is required to rejoin the main army in time for battle (*vide* R., Chapter IV.), and that the original object in sending out the detachment was to threaten some vital point, and induce the enemy to make a larger detachment and thus weaken his main army (*vide* A, Chapter IV.).

It may be of assistance to draw on transparent paper the situation it is desired to arrive at when the Staff Ride commences. This sketch should be drawn on the same scale as the map in use, so that it can be moved about and made to fit in with the physical features of the country.

Sketch No. 18 will illustrate the requirements of the case, assuming that the scale of the map in use is sixteen miles to an inch.

The Blue army must have invaded the Red country, in order to create a vulnerable line of communications. If

possible, this line should run back towards the flank, where it is most suitable for Red to detach troops. The main armies require a fairly open space for their operations, and the detachments, especially the Red detachment, require country with obstacles to assist them.

If we turn now to Sketch No. 15, we find that the two parallel ridges running east and west through Munster divide the country into three sections, that on the north being most suitable for the operations of the main army. The Galty and Ballyhoura mountains will provide the necessary obstacle, though they are on the opposite flank to the obstacle shown on Sketch No. 18. If, however, the transparent paper is turned upside down the desired situation would be changed to suit the ground.

The frontier between Red and Blue would be conveniently placed if it corresponds with that dividing the provinces of Munster and Leinster. This line runs from Waterford to Roscrea. It is necessary, first of all, to ascertain the best position for the main armies, and then describe how they got there.

If it is intended to use the Galty and Ballyhoura mountains as the obstacle, the Red army must be somewhere about Kilmallock, so that the Red detachment can operate with some safety towards Caher against the Blue line of communications, and so that the Red detachment, by drawing the Blue detachment towards Mitchelstown, will be able to hold the passes over the mountains to the north, and rejoin its main army in time for battle more rapidly than the Blue detachment. It appears desirable therefore to place the Blue main army to the east of Kilmallock, probably about Tipperary.

The next step is to describe the events that have occurred up to the date of the commencement of the Staff Ride, decide upon the capitals of Munster and Leinster, and fix the line of communication of the Blue army. To

get the main armies into the required position, Red can invade the Blue country and then be driven back, or Blue can invade the Red country, defeat the Red army, and drive it back towards Kilmallock. It is immaterial which course is adopted, provided that a battle is fought before the commencement of the Staff Ride, because this, together with the lengthening of Blue's line of communication, gives a sufficient reason for the pause in the main operations.

It would be best, perhaps, to assume that Red first invaded the Blue country, was defeated and driven back, and that the railways were destroyed as the Red army retired. This would increase Blue's difficulty in pushing the pursuit. It should be remembered that events do not move so rapidly in real war as they do on a Staff Ride, and the umpires should check the extraordinary rapidity noticeable during a peace exercise. Red must make the detachment to Caher when retiring through Cashel, and Blue cannot pass Cashel without sending a detachment to guard its southern flank. The Mitchelstown pass over the Galty mountains must also be occupied by a Red detachment, to keep open communication between the main Red army and the Caher detachment (*vide* O, Chapter IV.).

As the physical features of the country render it desirable for the detached operations to take place on the south flank of the main armies, it is preferable to select some southerly town in Leinster as the Blue capital. Waterford is perhaps too far south, because if this was the capital the operations of the main armies would have been farther south. Kilkenny is rather too close to the frontier, so perhaps Carlow would be the best place to select. Killarney would be a good locality for the Red capital, as it would increase the doubt in Blue's mind as to whether the Red commander intended to retire north or south of the Galty mountains. The two capitals are

only 130 miles apart, and it may be necessary to change their position when we begin to work out the scheme. As the Red army is operating in its own country, with the railways behind it intact, its line of communication with the capital is not of vital importance. Both Carlow and Killarney being open to possible raids from the sea, it would be advisable to neutralise the sea power of each belligerent by assuming that their naval forces are insufficient to affect the course of the operations on land.

Having thus fitted the framework of the scheme into a definite area of ground, the general and special ideas can be prepared, or, in other words, the officers taking part in the Staff Ride must be supplied with at least some of the items of information they would possess in real war, and which are detailed in the last part of Chapter III.

Sufficient attention is not always paid to the class of information which is included in the general idea. It should be remembered that it is read by both sides, and that the officers on one side will know that the enemy is in possession of the information which is inserted in this document concerning their own forces and movements. For example, it might be stated in the general idea that when retiring through Cashel the Red commander detached a force to Caher. This appears innocent enough at first sight, but it at once gives the Blue commander very important information: it tells him that it was a Red detachment and not the main Red army, and all doubt as to which is Red's main line of operations will be at an end. The Red commander will know that Blue is aware of his detachment to Caher, and the problem for the Blue commander will be greatly simplified.

It is sometimes desirable to give one side—say Blue—some information about Red which Red does not know that Blue possesses, or is unaware if Blue possesses or not. Such information should be put into the special idea for

Blue only. For example, if, after reaching Cashel, Blue discovers that Red has retired, this might go into the general idea; but if it is desired to let Blue know that Red's main army has retired on Kilmallock, the fact should be inserted in the special idea for Blue only, otherwise, if this information is included in the general idea, the Red commander would know that Blue was aware of the position of the main Red army, and Red would not know this in real war.

The main object of the general idea is to give the officers a bird's-eye view of the whole situation, but only so far as it would appear to officers of both armies. All accurate details as regards strength, intentions of commanders, &c., should be inserted in the special idea for each side.

Any assumed change in the physical features of the country, the railways, roads, &c., or the introduction of imaginary fortresses, should be stated in the general idea, because it may be presumed that each side has some knowledge of the theatre of operations. For example, if the Red side is limited in the special idea to the use of one railway, and it is stated that no others are supposed to exist, the fact should be indicated in the general idea, because the Blue commander would be aware of it in real war, and the Red commander would know that he was aware of it, and the strategical plans of each commander would be affected thereby. Similarly, any demolitions which have been carried out by one side in localities which have been reached by the other should be mentioned in the general idea, because each would know that the other was aware of the fact. Any fortresses which are supposed to exist should also be described in the general idea, together with the general line of their permanent defences. This would be known in real war, and a fairly accurate estimate could be made of the strength of the garrison if the extent of the perimeter is known.

When first drafting the scheme for a Staff Ride, it will save some trouble and reduce the probability of mistakes if a fictitious date is adopted in the first instance. When the scheme has been worked out to the stage where the Staff Ride commences the whole of the dates can be altered. If this is not done it is invariably necessary to alter the back dates several times, so as to work up to the exact date of the Staff Ride; whereas, if the scheme is drafted with fictitious dates, and it is found that insufficient or too much time has been allowed for a particular operation, the one date can be altered on the spot without changing those that have gone before.

Finally, before preparing the general and special idea, the ground should be visited to ascertain if it is suitable for the purpose. In the particular case under consideration it would be necessary to ascertain whether the country between Cashel and Mitchelstown, and thence to Ballylanders, is suitable for the operations of the Red detachment, and what proportion of cavalry and artillery could be usefully employed. Also whether the mountains between Caher and the Michelstown–Ballylanders road, and thence westwards to the Ballyorgan road, are impassable for guns; if not, they should be assumed to be impassable, except at Ballylanders, for the purposes of the scheme, and the fact stated in the general idea.

The chief difficulty yet to be overcome is to reduce the size of the main armies to accord with the somewhat limited area available for their operations between the Galty mountains and the Shannon. Four divisions and three cavalry brigades on the Red side, and five divisions with three or four cavalry brigades on the Blue side, would be quite as large a force as could operate in such a narrow strip less than 30 miles wide.

Then again, no country of the size of Leinster or Munster would possess an army of this size, and we im-

mediately become involved in the unrealities which are characteristic of these imaginary schemes. Even if we deal only with the frontier line, which is really all we require for the purposes of our scheme, we must then imagine that Leinster and Munster are much larger than they really are, and even then it is difficult to imagine one State with only four divisions going to war with another State which has only five.

The favourite solution is to get rid of the main armies altogether, and turn the whole of the operations in the immediate theatre of war into a sort of side show, like Falkenstein's operations on the river Main against the Austrian Allies in 1866, whilst the main Prussian army was fighting the Austrian army in Bohemia. But neither Ireland nor England is big enough for such extensive schemes; furthermore, it would be necessary to go into a long explanation showing why the main armies were operating elsewhere, and why these two smaller armies were left to protect such vital points as the capitals of the two countries. It is this difficulty which has brought about the undesirable introduction of the impossible landing of small forces intended for the invasion of a hostile country, whilst the latter's unpreparedness for war has compelled her to send an equally small force to repel the invasion. As this same difficulty will occur with any scheme, based on an imaginary situation, which has to be worked out in England or Ireland, the following methods of dealing with it may be worth mention.

An endeavour can be made to localise the operations, without entering upon any extensive details, by assuming that the boundary between Leinster and Munster is part of a frontier line between two powerful and extensive countries that are at war with each other. Owing to physical obstacles, the Munster army is unable to invade on one line, and has detached four divisions to advance

eastwards, north of the Galty mountains, whilst the main army invades from the north through Ulster. The Leinster army, aware that the main line of invasion must come from the north, has concentrated on that side, leaving a detachment to deal with any advance from the west, just as Von Moltke did in 1866. In this case the line of communications of the Munster army could run westwards through Killarney, or Tralee, to the capital, which would be some imaginary place in mid ocean, and the "side show" could continue on its original lines.

Another method would be to assume the same frontier line, and suppose that a war was going on between Leinster and some imaginary northern State, and that Munster, who had originally been neutral, had been induced to throw in her lot with the northern power and act against the Leinster line of communications, just as Prussia was persuaded to join Austria and Russia and act against Napoleon's line of communications in 1805. In this instance, however, though the Prussian army was mobilised and ready to move, Napoleon's victory at Austerlitz induced Prussia to change her mind.

Another method would be to assume that Leinster was engaged in a war beyond the seas, and that her available resources at home were reduced to a few divisions, and that Munster, by joining the enemy, was strong enough to create a diversion in favour of her ally. This situation has hardly occurred since the declining days of the Roman Empire, because when a nation has been engaged on a distant enterprise, like ourselves in South Africa, or the Russians in Manchuria, she has retained at home, in the one case a powerful fleet, or in the other a powerful army, to keep watch over the safety of the house. It is, however, conceivable that such a situation might arise, especially in the case of an insular or semi-insular country so absorbed in colonisation and commerce that it had no inclination to

pay its insurance policies in the shape of fleets and standing armies.

Another method would be to create such a situation as arose in Spain at any time during the Peninsular War, in Turkey and Armenia in 1877, or in France at the end of 1870, when the various forces of each belligerent were widely scattered and engaged on several independent campaigns.

The only disadvantage of this method is that it becomes necessary to write a long description of how the various parts of the army got into this situation, and when the Staff Ride is held in England or Ireland, there is not enough room for such extended operations without turning the sea into dry land.

Sufficient has been said to explain the difficulty and to suggest somewhat indifferent means of overcoming it, and we can now endeavour to write out the general idea, which might take the following form, with the paragraphs numbered to facilitate reference when studying the work done by the officers (*see* Sketch No. 15).

GENERAL IDEA.

1. The boundary between Munster and Leinster is assumed to be part of a frontier between two powerful and extensive States, Red to the north and west, and Blue to the east. The Blue capital is Carlow. The Red army is slightly superior in numbers to that of Blue, and both are organised in the same manner as the British army at war strength. Red has had more recent experience of war than Blue.

2. Owing to physical obstacles, the Red army has been compelled to invade on two lines, one from the north through Ulster, and one from the west through Munster. It soon became apparent that the main line of invasion was from the north, and that the main Blue army was also operating in that direction.

3. On June 4, 1907, the southern Red army, drawing

supplies through Killarney or Tralee, advanced from the line Killenaule–Thurles, and on 5th and 6th attacked a Blue force which was holding a strong entrenched position, facing west, on the left bank of the Munster river about Urlingford.

4. On June 7 a heavy counter attack was delivered by Blue against the Red northern flank, and the Red army was compelled to fall back on Thurles. The Blue force, advancing in superior numbers, forced Red to retire on Cashel. During this retirement Red destroyed all railways leading across the frontier.

5. Red then took up a strong position with his southern flank resting on the right bank of the Suir, south-west of Golden, and the northern flank about Ballagh. Red cavalry protected both flanks, and also guarded all approaches towards Caher from the north. This position was unsuccessfully attacked by Blue on June 14.

Note.—The Galty mountains are impassable west of Caher, except by the roads leading south from the neighbourhood of Ballylanders and Kilfinnane.

Notes on the General Idea.—Paragraph 1. The boundary between Ulster and Munster is assumed to be part of a frontier between two powerful and extensive States, Red to the north and west, Blue to the east.

This assumption regarding the frontier is sufficiently explicit, because the only part of it which affects the Staff Ride is that between Munster and Leinster. It is necessary to introduce two powerful and extensive States if it is desired to practise European warfare. The exact size of the States is immaterial; we know Red is north and west of Blue, and that the Blue country lies to the east. That is quite sufficient for our purpose.

The remainder of the paragraph deals with the superiority of Red, which provides a sufficient reason for Red to

invade. The item regarding experience of war is introduced to improve the *moral* of Red.

Paragraph 2 is open to criticism. When an army invades on two or more lines, the commander endeavours to concentrate his forces before battle, just as Von Moltke hoped to do in Bohemia in 1866, and with the First and Second German Armies in France in 1870. In this scheme, however, no mention is made of any point of concentration; the southern Red army, by its advance towards the Blue capital, is nevertheless threatening a Blue vital point, and Blue has been compelled to detach a sufficient force to guard the safety of this point. On the Blue side the situation is similar to Von Moltke's detachment under Falkenstein in 1866, which was sent to deal with the troops of the German States that had sided with Austria, and who might advance on Berlin if it was left unprotected. There was no question of concentrating these forces in the main theatre of war in Bohemia, and they were practically carrying out an independent campaign in Germany on the river Main, just as the Red and Blue southern forces in this scheme are fighting in Munster while the main operations are being decided away to the north in Ulster.

The remainder of the general idea simply gives a brief sketch of the operations up to the date of the commencement of the Staff Ride. The object of making Red advance first was to prevent Blue from seizing any railways in Munster, and thus facilitating his line of supply. It was necessary for Red to retire in order to get the Red army near Kilmallock, with the Galty and Ballyhoura mountains on his southern flank. In this manner the Blue communications will not only be sufficiently long for our purpose, but they will be sufficiently insecure to warrant the detachments we propose to employ.

The second battle, fought on the Suir, increases the probability of a pause in the main operations, which in

real war is generally the moment when detachments are first made.

It will be observed that no mention is made in the general idea of the two detachments A and B referred to on Sketch 18. The reason for this is to be found in the nature of the situation produced by the scheme. It would be difficult to find any item of information regarding these detachments that each side would know, and that each side would also know that the other was aware of. This being the case, such information is barred from insertion in the general idea, and must be reserved for the special ideas. For example, it would be a mistake to say that two days later Blue discovered that the Red army had retired westwards, and that a strong force, facing north, was holding a position near Caher. If this was done, each commander would know exactly what information the other possessed about his own movements, and there would be no longer any doubt as to the direction of the Red line of retreat.

To enable the Red detached commander to reconnoitre the ground, it will be necessary to commence the Staff Ride the day before the main army retires; otherwise, as will be seen later, it will be impossible to give him a free hand in the selection of the position he would take up near Caher. The advance of the Blue army to Tipperary and the detachment of a Blue force towards Caher must be given in the special idea. As matters stand, the officers commanding the Red and Blue main forces would each be unaware of the line of operations selected by the other, and the commanders of the Red and Blue detachments near Caher will each be uncertain whether he has got the enemy's main army in front of him or only a detachment. The defensive attitude on both sides which may result from this situation will be quite as instructive as any other solution; and, if desired, it can be remedied

at any moment during the Staff Ride by providing one or both commanders with further information.

The special idea on each side should contain an elaboration of the events which have occurred up to the date of the commencement of the Staff Ride; the composition of the main body and of the detachment; the intentions of the commander of the main force, and his instructions to the officer commanding the detachment; together with any further information about the enemy which the officers would be acquainted with in real war.

The strength and composition of the detachment would depend on two considerations: first, on the number and rank of the officers to be employed on the Staff Ride; and secondly, on the result of the visit to the ground, which would disclose the suitability of the country to the operations of a detachment of a certain size. For example, on a divisional or "command" Staff Ride, General officers would be employed in command of the forces, and they are usually given a somewhat larger command than they hold in peace time. For a brigade Staff Ride officers commanding units are generally given command of the detached forces, which should not then exceed a brigade of infantry with some cavalry and artillery attached. In the particular scheme under consideration, if it is desired to hold a very large Staff Ride, it would be best to utilise the two main forces, because the situation hardly allows of a detachment towards Caher from either force of much less than a brigade or much more than a division.

The suitability of the selected area in its relation to the size of the force to be employed is frequently neglected when preparing the scheme, and sometimes we find that a detachment is sent off in perfectly open country to carry out a task which it could never perform in war without serious risk of annihilation. This has also occurred in actual war with disastrous results. The visit to the

Clonmel–Mitchelstown valley would probably disclose the fact that one Red infantry brigade, with a comparatively strong force of artillery and cavalry, could operate with safety and effect against a superior Blue force. The northern flank of this detachment would be secured by the impassable Galty mountains, and the southern flank could be protected by cavalry operating along the western ridges of the Knockmealdown range.

The further information which should be given to each side can best be considered when preparing the special ideas. The main point to be remembered is that the officers should be given no more and no less information than they would possess in real war. Schemes have more frequently been spoilt by giving too little than too much information, and this has been caused chiefly by an unnecessary craving for brevity.

When the general and special ideas have been completed they should be carefully studied, and the question answered whether the officers have been given the information they might reasonably be expected to possess in real war. Even this is not sufficient, because the commander or staff officer who has prepared the scheme and worked out all the details knows exactly what he has put into the minds of *both* commanders, and is incapable of placing himself solely in the position of *one* of them. Moreover, he has got a great deal more in his mind concerning the scheme than he has put on paper, and he has probably forgotten to insert some important point which ought to appear in the special idea.

In order to ensure that the scheme is in every way suitable for the purpose required, it is essential that it should be worked out on the map by two capable officers who have not seen it before, one officer being given the special idea, Blue, and the other the special idea, Red, both, of course, being given the general idea. These

officers should then be asked to study the situation, formulate a definite plan of action, state whether they consider any further information should be given, notify any mistakes, and suggest any improvements which would make the exercise more instructive. Two officers who are to be employed on the directing staff should be selected for this work, because, having studied the situation themselves, and having been called upon to propose a definite plan of action, they will be in a better position to discuss and criticise the work done by the officers during the Staff Ride.

In paragraph 5 of the general idea, the information regarding the operations leading up to the despatch of a Blue force to Caher is necessarily vague, and a more detailed statement must be inserted in the special idea for Red. So far no reason has been assigned for the retirement of Red from its position on the Suir. This retirement is necessary for the purposes of the scheme, in order to utilise the obstacle formed by the Galty mountains, and the same reason would be sufficient in real war. The Red commander, though he had repulsed the attack on his position behind the Suir, might be unable to assume the offensive himself with any hope of success. To remain in his present position would mean a subsequent attack by Blue with all his forces concentrated and with no danger threatening his line of retreat. A more favourable position for Red to stand and fight would be farther west, where Blue would be uncertain as to the position of the Red army, would be anxious about his line of communications, and would probably have weakened his main force by detachments. This appears to be a satisfactory explanation.

It is now necessary to consider the size of the Red detachment and what instructions it should receive. We have seen already that the ground is probably suitable for

a detachment of any size, varying from one infantry brigade to a division, with plenty of cavalry and artillery. As the Red commander intends to fight somewhere in the neighbourhood of Kilmallock, and as he can easily recall the whole or part of this detachment in sufficient time for battle, provided he retains possession of the Ballylanders Pass, there is no reason why he should not detach a division in the first instance. Such a force would be more likely to deceive the enemy as to the direction of the retreat of the Red army, it would be more likely to draw away a still larger detachment, and if the Blue commander decided to make his main advance down the Blackwater valley, a division would be none too small to discover this fact and to delay his advance while the Red commander decides upon a fresh plan of operations and moves his troops in the required direction.

So it appears in this instance that the size of the force depends chiefly upon the nature of the Staff Ride. We will assume that it is a divisional Staff Ride, and decide upon one infantry division as the nucleus of the Red detachment.

In continuation of the idea of deceiving Blue as to the Red line of retirement, and for other reasons already mentioned, it appears necessary to employ a considerable force of cavalry. It is always undesirable to break up a cavalry brigade, chiefly because a complete brigade in one place, with its commander, staff, and accessories, is usually a more efficient fighting machine and can produce a greater effect than a brigade split up into two parts and operating in different localities. Difficulties of food, forage, ammunition, artillery support, &c., immediately crop up in real war, though they are not so apparent on a Staff Ride.

If we send one regiment with our detachment it will not be strong enough to materially assist the detachment

commander, and the efficiency of the rest of the brigade left with the main force will be seriously impaired. If we take two regiments, one odd regiment belonging to no one will not be of much use to the main body. It is suggested, therefore, that a whole cavalry brigade should accompany the Red detachment, and that two cavalry brigades should be left to cover the front and northern flank of the main Red army. The immediate front of the main force can be watched by the infantry and by the divisional squadrons, whilst the two cavalry brigades should stop any hostile cavalry action between Limerick and Hospital, a distance of fifteen miles. If, on the other hand, the Blue cavalry make any wide detour round the south flank by Dungarvan and Fermoy, the Red cavalry brigade at Caher will be well placed to deal with it, and will be performing the double duty of guarding the extreme southern flank of the main army and materially assisting the Red detachment in the execution of its task.

It will be noticed that the troops have been selected with due regard to the requirements of the situation, of the ground, and of the Staff Ride, and not in the haphazard manner which is so undesirable, and which almost invariably produces false teaching during the course of the exercise.

The instructions given to the commander of the Red detachment will depend to some extent on the size of the force employed. If only a brigade, it can do little more than draw the enemy towards Mitchelstown, and then be ready to march quickly over the pass and join the main army for immediate battle. If a division is employed, more elaborate instructions are possible. It can assume the offensive northwards from Caher if it is not heavily attacked itself. If attacked by greatly superior numbers it can fall back on Mitchelstown, gaining time for the Red commander to make fresh dispositions. In fact, there

are several courses open to it which it is unnecessary to consider here.

The instructions to the officer commanding the detachment might be of the following nature:

The Red commander has decided to retire on Kilmallock with the object of drawing the Blue army within the influence of the obstacle formed by the Galty mountains. A detachment is sent to Caher to deceive Blue as to Red's line of retreat, and prevent Blue from marching into the Blackwater valley without some delay and without ample warning being given to Red. It is the task of the officer commanding this detachment to deceive the enemy as to his own strength, to assume an offensive or defensive attitude as the circumstances of the case require, and in any case to prevent the main Blue army from advancing west on Kilmallock without leaving a larger force than the Red detachment to guard his rear.

Finally, the tactical situation at the moment when the Staff Ride commences must be clearly stated, so that the Red commander will know where to lay his hands on every unit of his force at the commencement of the exercise. It is a mistake to place the troops in battle array, because that might not be the method which the Red commander would adopt; it is better to commence the Ride with the troops arriving in bivouac that night, with no immediate prospect of a battle on the second day, which latter would be devoted to a reconnaissance of ground with a view to the tactical operations which will take place on the third and fourth days. For this reason it is usual for the troops to arrive at bivouac beyond reach of the enemy on the Monday night, and have a fairly clear march in front of them on the Tuesday, so that the day can be devoted to reconnaissance work around the new bivouac before the troops arrive.

It is a mistake to ask officers to reconnoitre ground for

the use of troops after the latter are supposed to have arrived, because it would be useless in real war, and they lose interest in the work. For example, an officer should not be asked to reconnoitre during Tuesday an outpost position which was supposed to have been held on Monday night, or to reconnoitre a road for the advance of a force which the troops were using the same day. It is, however, quite practicable to ask officers to select during the day a bivouac or an outpost position which the imaginary troops will occupy towards the evening of the same day, because the reconnaissance work can be completed before the troops arrive.

It is not always easy to arrange this matter, as appears in the particular case before us. The best method would be to suppose that the Red detached force was collected at Caher on the evening of the first day of the Staff Ride, that the ground to the north of Caher was held by the Red cavalry, and that the main Red army would commence its retreat from the Suir on the second day of the Staff Ride, that is, on June 15.

But if we adopt this plan a more serious difficulty at once arises. If the Staff Ride is to commence on the evening of 14th, and the main Red army is not to retire until the 15th, the Blue commander would know nothing of Red's retreat until the evening of 15th at the earliest, and perhaps not until 16th. There would be, therefore, no occasion for him to make a detachment towards Caher, and there will be nothing for the officers on the Blue side to do until 16th. These difficulties arise in the preparation of all "imaginary" schemes, and frequently necessitate important changes in the general and special ideas, or the abandonment of the whole scheme.

It is inconvenient for the officers on the Blue side to assemble on 16th, two days after those on the Red side, so the course of events must be altered to suit the require-

ments of the case. The Staff Ride might commence at 5 P.M. on the 15th instead of 14th June. It will then be necessary to postpone the arrival of the Red detachment at Caher till the afternoon of 15th, and for the cavalry brigade to cover this detachment till the afternoon of 16th, by which time the commander of the detachment will have had time to reconnoitre the ground round Caher and decide upon his course of action. It is also necessary for the Blue commander to be aware of the Red retreat before 5 P.M. on 15th, in order that he may make up his mind to detach a force to Caher, and thus give the officers on the Blue side something to do.

The special idea, Red, can now be drafted, assuming that the officers of both sides assemble at 5 P.M. on 15th June, the day after the attack on the Red position has been repulsed (*see* Sketch No. 15).

SPECIAL IDEA, RED.

1. The Red southern army consists of four divisions, three cavalry brigades, with one wireless telegraph company, two air-line telegraph companies, one balloon company, and one bridging train; the Blue army is believed to consist of five or six divisions with three or four cavalry brigades.

2. Though the Blue attack was repulsed, the Red commander was of opinion that he would have no opportunity of attacking the enemy on the left bank of the Suir with any hope of success. He decided, therefore, to commence a retirement on Kilmallock on 15th, and draw the Blue army within the influence of the obstacle formed by the Galty mountains.

3. In order to deceive Blue as to the line of retreat of the Red army, and induce him to detach a large force to protect his flank and rear, and thus weaken his main body, a Red detachment consisting of the 8th infantry division, one balloon section and the 7th cavalry

brigade, under the General officer commanding 8th division, is moved to Caher during the afternoon of 15th, covered by the 7th cavalry brigade. This brigade has been holding the hills north-east and north of Caher, on the line Clerahan–Newinn, and thence westwards to the Suir, and has not been seriously engaged either on 14th or 15th June.

4. The officer commanding the detachment is directed to do his utmost to exaggerate his numbers in the eyes of Blue, and to prevent the main Blue army from advancing westwards, without leaving a larger force than the Red detachment to guard its rear. He is also directed to assume an offensive or defensive attitude as circumstances appear to dictate, but in any case he will attack northwards on 17th if he is not himself attacked. He will watch the Suir and Blackwater valleys to the east, and finally he will be prepared at all times to rejoin the main army as rapidly as possible with the greater part of his force, *via* the Ballylanders Pass.

5. The main Red army will retire to bivouacs in the area Hospital, Ballylanders, Kilmallock, Bruff, with strong outposts east of the Ballylanders–Hospital road. The Ballylanders Pass will be held by a detachment consisting of two battalions, one battery, and a squadron from the main army. The Red commander intends to assume the offensive with the main army at the earliest possible moment.

Notes on the Special Idea, Red.—Paragraph 1. The Red force, consisting of four divisions, is given a balloon oompany and a wireless telegraph company, so that details regarding these units can be discussed during the Staff Ride. The two telegraph companies are in addition to those with the divisions, and would be fully employed. Only one bridging train is included, as there are no wide rivers in the theatre of war.

Paragraph 2. This is a reasonable assumption, because, if the superior Blue force was repulsed in its attack on the Red force behind the Suir, it is probable that any attack made by Red would meet with an even greater reverse. If, however, Red is able to draw Blue within the influence of the obstacle formed by the Galty mountains, it is possible that a better opportunity may occur for Red to concentrate superior forces against Blue, when the latter will have a longer and more vulnerable line of communications to protect.

Paragraph 3. This is retained in its original form, though it is open to question whether the Staff Ride might not commence at a later date—for example, after the Blue force has attacked and captured Caher, and has left a small containing force at or south-west of that place. If the Blue commander, having captured Caher, decides to advance through Tipperary against Red, he cannot afford to detach more than a brigade towards Caher, otherwise he will be too weak to attack Red with a fair prospect of success. As we are considering a divisional Staff Ride, we require a force stronger than a brigade on each side, so it is considered best to make no alteration. For a brigade Staff Ride, where smaller forces are required, the scheme could be varied as suggested above, the Red detachment originally left at Caher also being reduced to about the strength of a brigade, with a brigade of artillery and one regiment of cavalry attached to it. The date of the commencement of the exercise would then be changed to 5 P.M. on 17th, immediately after the Blue force had attacked and driven the Red detachment out of Caher. The necessary additions must then be made in the special ideas, and information regarding the retreat of the Red army, together with the Blue attack on Caher, could be included in the general idea, because each side would be aware of it.

Paragraph 3 contains the plan of the Red commander, and is somewhat similar to what he would put in his orders to the officer commanding the Red detachment. The 7th cavalry brigade is placed in the position indicated for a double reason. First, it is necessary for the purpose of the scheme to cover the movement of the Red detachment to Caher. Secondly, in real war it would be necessary for the Red commander, when holding his position behind the Suir, to cover his right flank in this manner against any hostile cavalry action *via* Mitchelstown towards his rear.

The statement that the 7th cavalry brigade has not been seriously engaged either on June 14 or 15 implies that both men and horses are fresh, and having been in this locality for some time, the men would know the ground, and consequently would be able to offer considerable resistance to a Blue advance, and gain time for the commander of the Red detachment to reconnoitre and prepare a position for occupation by his infantry. The reasons for detaching a complete cavalry brigade have already been discussed.

Paragraph 4. This contains the instructions received by the Red detached commander. No mention is made of the possibility that he may be attacked by greatly superior numbers, and it is probable that this would be omitted in real war. If he is attacked in this manner, the ground appears to be favourable for a small force to give a good account of itself against superior numbers, and it is undesirable to attempt to indicate what a commander should do to meet every situation which can arise. If he is told to retire directly he is attacked by a superior force, he usually discovers, or imagines that he discovers, that the enemy is in greatly superior strength at a very early stage in the proceedings, and his operations lack initiative, determination, and tenacity. Provided it is clearly stated why the detachment is made, and what it is expected to do,

the method of executing the task should be left to the local commander. Every one agrees with this principle, but it is not always applied in war.

Paragraph 5 describes the movements of the main Red army. It is necessary for the officer commanding the detachment to know this, and further information on the subject should be conveyed to him in the narratives, as the Staff Ride progresses, in order that he may know from day to day the movements of the main army and the intentions of its commander, as he would do in real war.

The preparation of the Blue special idea will be more simple than that of Red, because many of the points dealt with in the latter involve a consideration of the former. Before drafting the special idea for Blue, it is as well, however, to run through the events and ascertain that everything is suitable for the instruction of the officers on the Blue side as well as on the Red.

The Blue commander fails in his attack on 14th, and is unlikely to do much on 15th. During the morning of 15th his cavalry may observe some sign of retreat, and for the purpose of our exercise we must let him know by the afternoon of 15th that Red is retiring, that the ground north of Caher is strongly held, and that a Red column was seen during the day moving south-east along the Tipperary–Caher road.

The Blue commander would naturally prefer to operate north of the mountain range running west from the Galty hills rather than in the narrow Blackwater valley to the south of it. So far he has obtained no decisive victory over Red, who has been able to repulse his latest attack. Certainly he has driven back the invader and gained considerable *moral* thereby, but he will be anxious to bring him to a decisive battle and thoroughly defeat him before he reaches the mountainous country east of Tralee. Another powerful argument in favour of an advance north

of the Galty ridge is time. If he becomes involved in the Blackwater valley, he will not be able to use his whole strength, and a comparatively small Red force could greatly delay his operations. The supply of food and ammunition would then become a serious difficulty. By advancing direct on Tipperary and leaving a detachment to guard his south flank and rear, he might bring the enemy to battle near Kilmallock before the Red troops left at Caher could rejoin.

The alternative course would be to seize and make sure of Caher before advancing, and employ a large force for the purpose. Having once seized Caher, a small Blue detachment would be on more equal terms with any Red detachment in that neighbourhood than if Caher was allowed to remain in the possession of Red. There is also the possibility that the Red army has taken up a flank position about Caher, and intends to attack northwards, in which case an advance on Tipperary, with Caher still in the hands of the enemy, would be a most dangerous operation. It appears, therefore, that two distinct courses are open to Blue: first, to leave a detachment to guard the rear, and march west with the main army; secondly, to employ a large force to attack and seize Caher, and then, leaving a detachment south or south-west of Caher, to follow the Red troops that retired westwards. Either of these courses could be made to fit in with our Staff Ride. In the first case the Blue detachment would be attacked and driven back by the superior Red division, and must then be reinforced, and in the second case the Red division would be attacked and driven back. It is fairly certain that nine Generals out of ten would attack Caher before moving westwards, so it appears best to adopt this course for the Staff Ride.

It may appear to the ordinary reader that all this discussion of the possible action of the two opposing

commanders is unnecessary, but it is the shortest way of preparing a scheme that does not turn out to be full of mistakes. These "imaginary schemes" cannot be written in a few minutes, because the officer who is engaged on the work is in reality working out the details of a whole campaign, with nothing but his knowledge of war and his imagination to assist him. If his imagination is allowed to run riot, both the scheme and the instruction imparted to the officers will suffer.

Before finally drafting the special idea, it is desirable to ascertain if suitable work can be provided for the officers on the Blue side. As we are working out a divisional Staff Ride where the infantry brigadiers will probably be commanding on each side, it is as well to provide each with not less than a division. On the Red side there is one division which is intended to fight in country highly suitable for a small force to delay a larger one. It is desirable, therefore, to allot about one and a half divisions for the Blue detachment, with the necessary artillery and cavalry.

On June 17 the Red force at Caher might be heavily attacked, and driven back towards Mitchelstown, by two or three Blue divisions. On 18th one Blue brigade might be ordered to follow up the retreating Red detachment, the main Blue army advancing north of the Galty mountains towards Tipperary. The Blue Brigade in the Mitchelstown valley might be attacked by the Red division on 18th, and driven back on Caher. Caher would then be reinforced by Blue, and on 19th the Red detachment, leaving a small containing force of about two battalions and one regiment of cavalry, would retire by Ballylanders and join the main Red army ready to attack the Blue army on 20th.

That would form an instructive series of operations both for the Red and the Blue officers, each in turn

being required to study ground both for attack and defence, in addition to all other details as regards bivouacs, outposts, action of the cavalry, battle-field staff duties, disposal of wounded, supply of food, ammunition, &c.

It may be argued that, though the operations described above would no doubt be instructive, the officers commanding the Red and Blue detachments may not adopt these plans. It is necessary to give these officers a perfectly free hand in formulating their plans of action, otherwise they will obtain but little instruction; and if they are given a free hand they may do something which is quite different to what the directing staff anticipate. It is possible, however, whilst giving them absolute discretion as to *how* they should carry out their task, to tie them down, either in the special idea or in the subsequent narratives of the operations which are issued daily, to one definite object. Herein lies the skill which is required in the conduct of these exercises, which is dealt with in Chapters VIII. and XII.

In war the detached Blue commander would be told that he was to capture Caher and clear the Mitchelstown valley, to enable the main Blue army to advance westwards in safety. In the same way we have already seen that definite instructions can be given to the Red detached commander. In neither case, however, is it suggested that these tasks should be carried out in any particular way. For example, if both detachments near Caher occupy defensive positions, then the narrative issued on the evening of June 16 can contain instructions from the higher commanders requiring more vigorous action on the part of their subordinates, in accordance with their original instructions.

It occurs sometimes that, owing to a hitherto unrecognised defect in the scheme, a commander on one side

adopts a course of action which would prevent any possibility of contact between the opposing forces during the period of the Staff Ride. The directing staff have then definitely told him to do something else. He does it of course, but uses the time-honoured argument that he would not do it in war; and any criticisms made upon his further operations are met by another ancient counter-stroke to the effect that if he had been allowed to carry out his original plan, he would never have become entangled in such a difficult situation.

The great anchor for the directing staff is the definite task given to the commander. If by his suggested course of action the commander does something which is at variance with the requirements of the case, the directing staff, by means of the narrative, and cloaked in instructions from the superior commander, can inform the detached commander that the methods he suggests are not approved, because they are at variance with his instructions, and that he must suggest an alternative course.

Even though the operations do not exactly follow the course anticipated by the directing staff, when preparing the scheme, the fact that the scheme has been worked out beforehand, and a probable course of events sketched out, will obviate many errors in the general and special ideas, and at least disclose the fact whether the scheme is likely to produce instructive situations. If not, it should be destroyed or radically altered, and a new one prepared. As a rule, it will be found best to commence the work over again. A faulty scheme, originally intended for one class of operation, cannot be twisted about to suit another without serious probability of the appearance of a still greater error.

It is now necessary to discover whether suitable work can be found for the officers on the Blue side, and whether

any further alterations must be made in the scheme. On 16th the officers can be employed in reconnoitring the ground north of Caher with a view to attacking the Red troops in that neighbourhood on 17th. Bivouacs and outposts for the Blue force can be arranged, and to avoid overcrowding it will be advisable to state in the special idea where the bivouacs of the main Blue army will be located on the evening of 16th.

On 17th there are two courses open to the directing staff. The officers can be taken on to the ground and all the details of attack worked out in accordance with recommendations made by the officers who had reconnoitred the ground on 16th, the exercise being conducted in the manner suggested in Chapter XVIII.; or the attack can be assumed to be successful and a defensive position selected south-west of Caher for occupation by the Blue brigade, which is to be left in the Mitchelstown valley, in case it is compelled to fall back later on. It would be best to adopt the first course, because the director could be present and conduct the exercise; and on the 18th the Blue officers would be arranging for the defence of a position near Caher, whilst the Red officers, having reconnoitred for attack on 17th, while the battle is being fought, could be exercised in delivering this attack on 18th, the director again conducting the exercise. As will be shown later, when arranging the work for a Staff Ride it is best for the directing staff to take the officers on to the ground on the last day, so that there is no work to look over when the Staff Ride closes, usually about 3 P.M.

On 19th therefore the officers on the Blue side could again be taken on to the ground, this time by the assistant director on the Blue side, and all the details of the defence of the position selected could be carefully studied on the ground.

Working on these lines, the special idea, Blue, can now

be drafted, inserting as we go along any small points which require attention or which would make the scheme more interesting for the officers under instruction (*see* Sketch No. 15).

SPECIAL IDEA, BLUE.

1. The Blue southern army consists of five divisions, one wireless telegraph company, two air-line telegraph companies, two balloon companies, one bridging train, one army troops transport and supply column, two field ambulances, and three brigades of cavalry. In addition to these one infantry brigade, one regiment of cavalry, and a battery of field artillery are dispersed at various points along the main line of communication, which runs through Killenaule and Kilkenny to Carlow. Supplies are also being forwarded from rail-head, which is at present at Ballybrophy Junction. Two railway companies are repairing the Maryborough–Thurles railway, and it is expected that it will be in working order as far as Thurles by June 22. Though the Red southern army is believed to be inferior in numbers to Blue, Red appears to be stronger in cavalry than was expected.

2. The Blue army suffered heavy casualties during the attack on the 14th, and the Blue commander, being of opinion that it would be difficult for Red to assume the offensive at once with any chance of success, decided to wait till his lines of communication were in better order before renewing his operations.

3. During the morning of the 15th information came in that Red was retiring. This was confirmed later in the day, and by 5 P.M. the Blue cavalry reported that they had gained the line Hollyford–Kilfeakle, and were opposing Red cavalry on the north and centre portion of this line, and Red infantry on the south. During the day Red troops were seen marching south-east along the Tipperary–Caher road, and a Blue cavalry regiment at Rosegreen

was unable to dislodge Red troops from the line Clerahan–Newinn and thence westwards to the Suir.

4. The Blue commander was of opinion that the main Red army had retired west, but he determined to clear up the situation about Caher before advancing westwards. With this object in view, the 18th division, 45th infantry brigade, and 9th cavalry brigade were ordered to attack the Red troops about Caher, gain possession of that place, and, advancing by Mitchelstown and the Ballylanders Pass, rejoin the main army, which would advance west directly Caher was occupied.

5. The officer appointed to command this detachment was directed to make all necessary preparations on 16th, and attack the Red troops about Caher on June 17.

6. At 5 P.M. on June 15 the Blue southern army was occupying the following bivouacs :

Army headquarters and army troops, 14th and 15th divisions (including 45th brigade of 15th division), about Holycross, with outposts to the west.

16th division between Holycross and Cashel, with outposts to the west.

17th division east of Golden, with outposts on the Suir.

18th division about Cashel, with outposts to the south.

7th and 8th cavalry brigades on the line Hollyford–Kilfeakle.

9th cavalry brigade, less one regiment at Rosegreen, in reserve at Ballagh.

The 18th division was heavily engaged on 14th, and the 45th brigade was mostly in reserve.

Notes on the Blue Special Idea.—Paragraph 1. The Blue army is made superior to Red chiefly because it is best for one side to be larger than the other. In this particular case the Blue capital, as in 1866, is so near the

Red eastern frontier that an adequate force is necessary to secure its safety. Line of communication troops should always be given to the invading side, and when the scheme is based on a threat against that line, the actual strength of each post should also be stated. The routes by which supplies are forwarded must be given, because a good deal of the commander's strategy will hinge on that. This is unimportant for the defenders, because they are operating in their own country; they have the use of their railways, and can usually supply themselves from several directions. If a railway is being repaired, rail-head itself and the locality it is expected to reach in a week or a fortnight's time should be stated, because this will influence the action of the invader. The reference to the Red cavalry is a type of the vague information a commander receives in real war.

Paragraph 2 supplies a reason for a pause in the operations of the main southern forces. It may be considered that this paragraph is unnecessary, because immediately afterwards the situation is changed by the Red retreat, and Blue is again called upon to advance. The chief object of its insertion was to complete the story and make it more realistic. Some people might think that if Red retreats, the Blue commander could stay where he is and wait till his lines of communication are in proper working order, and then advance against Red. This plan, however, would hardly be approved by a General who was conversant with the higher branches of the art of war, especially considering that the Blue communications are not yet very long. Such action would involve the loss of the initiative; the Red might be more sorely in need of a pause in the operations than Blue; the Blue capital is still close in rear; no decisive action has yet been fought, and Red may be falling back on reinforcements. The old principle of strategy applies here, as in all similar cases, that it is

necessary to seek out the enemy, bring him to battle and defeat him, at the earliest possible moment.

Paragraph 3. This gives an account of the Red retreat so far as it would be known to Blue. Some attempt has been made to mystify Blue as to the movements and intentions of the Red commander. In real war a commander is generally left in doubt regarding these points, and it is advisable to produce similar situations in peace exercises, to accustom officers to conduct operations with determination and vigour at a time when there is every temptation to delay.

Paragraph 4 contains the intentions of the Blue commander. The actual strength of the Blue detachment sent towards Caher can be varied according to the requirements of the Staff Ride, but it could not hope to do much if it was less than one division, and it is doubtful if the Blue commander would care to detach more than two divisions until he had more definite information of the whereabouts of the main Red army. As already noticed, the solution of this problem, both on the Red and Blue sides, would form an instructive strategical exercise for a large Staff Ride, where the officers on each side would be working with the whole of the Red and Blue southern forces, including the detachments. In this case the decision as to the strength of the detachments on each side would be left entirely in the hands of the commanders.

The plan suggested in this paragraph is open to criticism. The Blue commander is dividing his forces and is advancing on each side of an impassable obstacle, just as the Crown Prince did on each side of the Hochwald on August 5 and 6, 1870, before and during the battle of Wörth.

An alternative plan would be to detach one and a half divisions to capture Caher, and then send a smaller force towards Mitchelstown. As already explained, we require

at least a division for the purposes of the Staff Ride, so it is proposed to allow this imperfection to remain. The schemes presented to officers in war are by no means flawless, and we cannot expect to reach perfection when preparing an imaginary scheme in peace-time, though we should aim at making the strategical situation as real and as practical as possible.

Paragraph 5 affords the officers on the Blue side sufficient administrative and tactical work on June 16.

Paragraph 6 gives the exact position of all the troops on the Blue side. This is necessary, in order that the officer commanding the Blue detachment may arrange for assembling his force for the attack on the Red troops about Caher.

There are a few points in connection with these schemes which it is advisable to notice, because they arise in almost every scheme based on imaginary operations. It will be found that the commander on one side has an easier or more instructive problem to solve than the General who is opposing him. It is difficult to avoid this, because, when building up the general and special ideas, the director is bound to make the operations of one side hinge on those of the other, and it is more by good luck than good management when it turns out in the end that each commander has an equally difficult and equally instructive problem to deal with.

Then again, it may be found, as in this case, that the detached commanders on each side have no important strategical problem to solve; this perhaps is an advantage more than a disadvantage. Hitherto the directors of Staff Rides have attached great importance to the plan of operations, and both they and their staff, and consequently the officers under instruction, have become absorbed in strategical questions, which no doubt are most interesting, but which throw in the shade the solution of the more practical

problems of tactics and administration which form the daily study of subordinate commanders and staff officers in real war.

If it is desired to give more prominence to strategy, larger forces must be employed, such as the main southern armies in the above schemes. When the Red commander retires on Kilmallock, leaving a detachment at Caher, and the Blue commander is left on the Suir, an instructive strategical problem is presented to both commanders. In fact, it would form an interesting scheme, but would be more suitable for a command Staff Ride, where senior Generals are employed, than for a divisional exercise.

Having drafted the general and special ideas, two staff officers should be appointed to work out the problem, one for each side. They should have taken no part in the preparation of the scheme, and should be requested to bring to notice any defects they observe, such as Red being written instead of Blue, or north instead of south. A frequent source of error is caused by some slight alteration made at the end of one of the special ideas, which would involve an alteration somewhere else which is forgotten. For example, a Staff Ride was once held where a most important item of information was inserted in the special idea, Blue, which in real war would be well known to Red. By an oversight the Red commander was not informed of this matter till the final conference at the end of the Staff Ride, whereas if he had known it, as he should have done, at the commencement, the whole of his plan of operations would have been changed.

The two officers who work out the scheme should also be asked to state if they consider that they have been given sufficient information such as they might reasonably expect to possess in real war; if not, they should state what additions it is advisable to make to the scheme.

The general and special ideas can then be corrected, and finally prepared for issue.

Schemes which are taken direct from examples in history, and are not based on imaginary situations, are explained in Chapter VII. Those for single Staff Rides for operations against hill tribes or in savage warfare, are dealt with in Chapters IX. and X. Schemes for Regimental Tours are considered in Chapter XVII.

CHAPTER VI

A SUMMARY OF THE STEPS TO BE TAKEN IN THE PREPARATION OF THE SCHEME, EXTRACTED FROM CHAPTERS III TO V, WITH A FEW ADDITIONS

Before quitting the subject of the preparation of imaginary schemes it is advisable to review the various points that have appeared, and endeavour to draw up a few general rules which can be applied with advantage to all schemes, and which may save much time, trouble, and disappointment to those whose duties require the frequent preparation of these documents.

Perhaps the most important point of all, and one which applies equally to all staff work in the Army, is that no good scheme can be written in a few hours. However clever and however experienced in such work a staff officer may be, it is necessary for him to analyse most carefully every idea that is drafted into the scheme, to make sure that the conclusions and deductions which will be drawn from it are what is really intended, and that the officers have got sufficient information to work on.

Schemes drawn up in a perfunctory manner almost invariably react on the staff officer who has prepared them, and involve him in difficulties.

It is only human nature for officers under instruction to adopt a somewhat antagonistic attitude towards the scheme, and even to be secretly pleased when they discover a mistake. If this mistake is brought to the notice of the

staff officer, it is again only human nature for the latter to make another mistake—that is to say, to take up the cudgels in defence of his scheme, and thus involve himself in a labyrinth of unsound arguments to prove that the scheme is right. If there is a mistake in the scheme, or if during the exercise it appears that it could have been greatly improved by inserting one thing and omitting something else, it is better for the author to acknowledge the error.* He will find himself in good company, because no scheme either in peace or war was ever yet invented that might not be improved upon, and many of them, especially in war, contain serious errors.

If the officers under instruction are too critical, there is always one argument which is unanswerable, and which will make them return to their task with fresh ardour. No scheme was ever invented in peace-time which was more difficult or more impossible than some problems which officers have been called upon to solve in war, sometimes with the certain knowledge that by the evening neither they nor their men would ever be troubled with such matters again. Criticism, either on the part of the directing staff or the officers under instruction, is only useful on the one hand when it contains definite instruction, and on the other when it is necessary to enable the officer to fulfil his task. The critic who aims at proving some one else in the wrong and himself in the right will never be a good instructor, nor will he gain full value from the efforts of others to instruct him.

The great point for every one to remember is that we are all working for the good of the Army, and all endeavouring to gain sufficient knowledge of our profession to enable us, in our respective ranks and appointments, to do the right thing when the enemy is actually in front of us.

The following summary of Chapters III., IV., and V. is

inserted to assist officers in preparing schemes, so that they can see at a glance the successive stages in the construction of the general and special ideas, include important details which might be overlooked, and avoid the introduction of ideas which are of doubtful value.

At the end of each paragraph of this summary a reference is given to the pages where full particulars will be found of the points mentioned.

Detachments sent forward in front of an army should be avoided, except in desert or mountainous country where the enemy cannot bring large numbers against them (p. 48).

The physical features of the country and the roads, railways, &c., where the operations are actually taking place, should not be subject to any imaginary change, but large rivers, mountains, &c., can be supposed to exist close at hand, provided it is not actually required to traverse them. If it is desired to limit the use of roads, those available must be clearly indicated and all others described as impassable for one or all arms, according to the requirements of the case (p. 44).

When it is desired to introduce imaginary fortresses the general line of permanent works should be notified to both sides. Weather should be accepted as on the day of the exercise (p. 45).

It is generally considered desirable to give the commander on each side some exercise in the solution of strategical as well as tactical and administrative problems, but as the forces to be employed are small, it is not to be expected that any complicated problems of strategy can be prepared. By selecting a sound reason for making a detachment, the commanders on each side can be given sufficient freedom of action to ensure the consideration of a fair amount of strategy (p. 45).

It is most important to discover good reasons for making the detachment. These reasons can be found more easily after a campaign has been in progress for some time than at the commencement, when both armies are usually concentrated (p. 46).

A scheme based on a small detachment which is landed on the shores of England is usually lacking in probability and interest. Many difficulties arise, such as the disposal of the British Fleet, the fact that small detachments do not invade a hostile country, unreal delays in the mobilisation of the defending army, &c. (p. 47).

Sufficient information must be given in the general and special ideas, even if brevity is sacrificed for the purpose. The object is to afford officers a general knowledge of the situation such as they would possess in real war. If the scheme is rather long, the fact is immaterial, because it can be issued several days before the Staff Ride commences, and officers will have plenty of time to study it (p. 52).

Some attempt should be made to indicate the *moral* of the troops on each side, and the directing staff must discourage any attempts to use troops in an unpractical manner, such as to direct a division which has just failed in a costly attack to immediately advance against another part of the enemy's position (p. 48).

The scheme should include information on some of the following points according to the class of operation it is desired to practise.

The peculiar tactics of the enemy; the composition of his army, the efficiency of its training, its resources in men, money, and material; the national food-supply, system of government, and control of the Press. These could usually be summed up by stating that Red is a country similar to one European or other Power, and Blue to another. Other matters are the attitude of neutral Powers; the vital points on each side, such as the capital,

lines of communication, base, railway, road, commercial or manufacturing centres; fortresses, their strength, and sometimes a rough estimate of their garrison; and naval supremacy, without any unnecessary details as to how it was brought about (p. 51).

An officer when preparing an imaginary scheme is forced to rely on his knowledge of war, and on his own imagination, for the production of the required situation. A study of the following detachments which have been made in actual war for sound strategical reasons will help him to overcome his difficulties (p. 53).

A. A Red detachment made to threaten a Blue vital point and induce Blue to detach a still larger force, thus weakening his main army and enabling Red to concentrate superior force against it (p. 53).

B. A detachment made by a Blue force, acting on interior lines, with the object of delaying the advance of a stronger Red detachment, whilst the main Blue army concentrates superior force against another part of the Red army (p. 56).

In this case one army must usually be operating on two or more lines, examples of which are given on p. 56.

C. A detachment made with the object of deceiving the enemy as to the intentions of the General commanding the main army, especially when it is obvious that two or three distinctly different lines of operation are open to the latter (p. 59).

D. A detachment made from the flank of the main army with the object of gaining the enemy's flank or rear and inducing him to retire from a very strong position which cannot be attacked with a reasonable prospect of success (p. 60).

E. A detachment made before an attack with the sole object of cutting off the enemy's line of retreat, pursuing him, or confining his retreat to one desired direction, whilst the main army attacks him and drives him back, unaided by the detachment (p. 63).

F. A detachment made in connection with the attack or defence of a fortress, or to cover or raise a siege (p. 65).

G. A detachment made with the object of protecting the lines of communication of an army, and also of guarding its flank (p. 69).

H. A detachment made to guard the flank of an army when advancing, retiring, or stationary (p. 71).

I. A detachment made solely with the object of guarding the lines of communication of an army or some vital point at a distance from the main army, such as the capital, a great railway centre, an important pass, or a sea base (p. 73).

J. A detachment made with the object of attacking the enemy in rear, whilst the remainder of the force attacks the enemy in front (p. 76).

K. A detachment made with the object of blocking a defile (p. 78).

L. A detachment made to the front or the flank of an army to cover the crossing of a difficult obstacle or to cover a change of direction (p. 79).

M. A detachment made with the object of raiding the enemy's line of communication, either to obtain information as to his movements, to destroy an important railway

or magazine, or to induce him to detach troops from his main army to protect his line of supply (p. 81).

N. A detachment made to collect cattle or supplies, to prevent the enemy from using a certain area as a source of supply, to intimidate a troublesome population, or to quell a local rising (p. 83).

O. A detachment made towards another detachment to secure the junction of the latter with the main army (p. 83).

P. A detachment made either with the object of effecting a landing at one point on an enemy's coast-line, and thus diverting his attention from the point where the main landing is intended to take place, to secure a base for the landing of the main army, or to make a raid against some vital point (p. 86).

Q. A detachment pushed forward in front of an army to secure an important strategical point, such as a mountain pass, or to defend a supply depôt (p. 89).

R. A detachment which has been employed on one of the duties enumerated in the above seventeen different types, and which is required to rejoin the main army (p. 91).

Examples of detachments made in a campaign where the enemy consists of untrained soldiers, guerillas, semi-civilised or uncivilised inhabitants and tribesmen, are not very suitable to adopt as a basis for an imaginary scheme when it is intended that each side should be represented by a party of officers (p. 94).

When it is desired to practise the transportation of troops across the sea and their disembarkation, it is best to assume that England is a foreign country, in which case there is no occasion to introduce undesirable statements as to the disposal of the British Fleet (p. 94).

The unreadiness of an army for war is not a good reason

for making a detachment, because all armies ought to be ready for war, and it rarely occurs that they are not (p. 95).

In Chapter V. the following notes, which apply to most schemes, may be worth inclusion in this summary.

The selection of the particular form of detachment for each side will depend upon the nature of the ground where the Staff Ride is to be held, or else, the class of operation having been decided upon, suitable ground must be found which will meet the requirements of the case. Having decided upon the ground and the reason for making a detachment from one of the opposing armies, it is best to wait till the history of the operations has taken some shape before deciding upon the reason for making a detachment from the other army.

A sketch on tracing-paper of the situation it is required to produce, drawn on the same scale as the map, should then be prepared, and twisted about on the map, or turned upside down if necessary, until it fits in with the physical features of the country. The sketch of the situation will indicate the distance of the main army from the detachment, and the reason for making a detachment from one army will form material on which the general and special ideas can be constructed (p. 96).

Frontiers and capitals can be located wherever is most convenient, lines of communication and rail-head can be laid down; a description of how the main armies got into the required position, and why one of them made a detachment, can then be prepared. It is desirable that a battle should have been fought and that one side should have invaded the country belonging to the other before the Staff Ride commences. This gives a reason for a pause in the operations, and, what is more important, it is usually the period in every campaign when detachments are first made (p. 98).

None of these matters can be fixed definitely, because it will be discovered without fail, later on in the scheme, that some alterations are required. The main idea of the scheme must always be kept in view, otherwise it will be found that the narrative of events will drift into a totally different class of operation, which may be unsuitable for the size of the force it is desired to employ or for the ground where the exercise is to be held.

In the example of a scheme given in Chapter V. it will be noticed that the original idea was maintained throughout, and was applied to the scheme by utilising the obstacle formed by the Galty mountains. Whatever minor alterations were required, this one idea formed the corner-stone of the whole structure. It will save much labour if the scheme is built up in this manner, and, what is equally important, some finality will be reached at an early stage, and the completed scheme will prove to be more satisfactory and comprehensive than one commenced on no definite foundation.

It is best not to fix the strength or composition of any of the forces until a more advanced stage is reached, except that we are bound by circumstances to produce a detachment of about a brigade in a brigade Staff Ride and a division in a divisional Staff Ride. The exact composition of the detachment should not be decided in a haphazard manner, but only after visiting the ground and considering what amount of cavalry and artillery can usefully be employed in the type of country where the operations will take place.

Having thus prepared a general framework for the scheme, the history of the operations can be written, and we can turn to a consideration of what information should be put into the general idea and what should be kept for the special idea on each side.

It should be remembered that though modern science,

by means of ordinary and wireless telegraphy, has produced more rapid and more certain means of communicating intelligence and orders, modern weapons have caused a corresponding decrease in the extent and reliability of the information available regarding the strength, movements, and dispositions of the enemy.

It is false teaching, when instructing officers in peace time, to give them information about the enemy which they would never possess in war. The bad effects of such instruction are very apparent to the officer who has been taught in this manner, when he finds the enemy in front of him, and is incapable of deciding whether he has to deal with a hostile army corps or a few squadrons of cavalry with some horse artillery. In peace excercise he should be taught to arrive at sound conclusions as to the enemy's strength, not by counting the hostile troops in front of him, as they used to do a hundred years ago, but by studying the situation, the ground, and the resistance hitherto encountered. The situation may disclose what the enemy's strength is likely to be; the ground will show whether the position in front is suitable for occupation by a division or a brigade; and the previous opposition will indicate whether the hostile troops in front belong to the enemy's cavalry or his main body.

Officers commanding detachments in war are never so well placed, as regards information, as the commander of the main army. They have neither the means of collecting and sifting information, such as exist at army headquarters, nor have they such definite knowledge to work on as the Commander-in-Chief. He probably at least knows the approximate total strength that the enemy can bring against him, but neither he nor the detached commander can tell how many hostile troops the latter will encounter in the execution of his task. This is the main reason why it is so important that the officer commanding

a detachment should possess determination of character, because without it he will do little, and any hesitation, or needless change of plan, will not only defeat the object which he was sent out to attain, but may involve the detachment itself in disaster.

The general idea should include only such information as each commander may reasonably expect that the other possesses. Accurate details regarding the strength and composition of the opposing forces, the intentions of commanders, and the movements of troops should be reserved for the special ideas. The object of each commander should not be put into the general idea unless it is apparent from the previous history of the operations that each side would know it (p. 99).

Any assumed change in the physical features of the country, roads, railways &c., the introduction of imaginary fortresses, or any demolitions which both sides would be aware of, should be inserted in the general idea. The statement on page 51 regarding the military peculiarities of each side might all be included in the general idea (p. 100).

It is best to commence with a fictitious date, and then alter the whole of the dates when the scheme is complete (p. 101).

The ground should be visited before the general and special ideas are finally drafted, to ensure that it is suitable for the class of operation it is proposed to carry out (p. 101).

The general idea should contain a brief history of the operations which lead up to the situation at the commencement of the Staff Ride, and should give the officers a bird's-eye view, or general knowledge, of the main features of the campaign, such as they would possess in real war. The history should be prepared with due regard to probabilities and to the principles of strategy.

When it is desired to employ small forces for a Staff Ride, it will be necessary sometimes to form a detachment from a larger detachment, so as to avoid unrealistic invasions by two or three divisions.

The special idea for the side on which the whole scheme is based should be prepared first, and that for the other side made to fit in with its requirements. It should contain the strength and composition of the main army, so far as is necessary, and the exact strength and distribution of the detachment. In some schemes, where the main army is operating at a considerable distance from the detachment, it is unnecessary to insert details regarding the strength of the former. For example, in the Munster scheme no details are given of the main Red and Blue armies, who are fighting a hundred miles away in Ulster. When the main army is close to the detachment, its exact composition should be given in the special idea, as in the case of the Red and Blue southern armies in the above mentioned scheme.

As a rule it should be clearly shown whether the commander of either detachment can call for reinforcements. It is only human nature for a commander to get as many troops as he can, and when working out the scheme during the Staff Ride each commander will endeavour to collect the strongest force possible. It has sometimes occurred that a scheme has been spoiled by the commander on one side being allowed to assemble a larger force than was originally intended, and the operations have become too one-sided. For example, in a scheme where a line of communications has been protected by two or more flying columns, and the opposing force has been calculated of sufficient strength to deal with only one of them, some condition should be inserted to show the officer commanding one of these columns that he is unable to call upon the other for assistance.

Any information which one side might be expected to obtain regarding the strength of the other, from previous operations, should be included in the special idea. In the Munster scheme two battles had been fought, and though neither was decisive, the commanders on each side would be able to estimate within a thousand men the numbers on the other side, especially by the capture of prisoners.

The exact date when the Staff Ride commences must be carefully considered. The officers usually assemble during the afternoon of the first day, and the reconnaissance work on the ground will commence on the second day. This work on the ground must deal with military requirements which will not arise before the afternoon of the second day, and it must be assumed that all staff work which depends on the ground, and which would be required for any operations previous to the afternoon of the second day, has been completed. The work of the officers on the evening of the first day must be confined to the preparation of orders and appreciations, and matters of war administration, such as supply, intelligence, line of communication, &c.

The special idea on each side should contain an elaboration of the events described in the general idea, such as the exact composition of the main army (if necessary), and of the detachment; the intentions of the chief commander and his instructions to the officer commanding the detachment; any further information that the officers would be acquainted with in real war.

The strength and composition of the detachment will depend on the number and rank of the officers to be employed and the nature of the ground selected for the operations. This last is very important, because sometimes we find that a detachment is sent off into perfectly open country with no obstacle on its front or flanks to

assist it. This matter is considered further in Chapter VII. (p. 148).

In the desire for brevity, schemes have frequently been spoiled by giving too little information.

When the general and special ideas have been drafted, two officers, who have not seen the scheme, should be selected to work out the operations on the map, each officer being given the general idea and the special idea for one side. By this means mistakes will be discovered and improvements suggested (p. 109).

The composition of each detachment should not be arrived at in a haphazard manner, but should be decided after a careful consideration of the ground, the requirements of the situation, and the nature of the Staff Ride (p. 112).

The instructions to the commander of each detachment should include a definite task, but should contain no suggestions as to how the problem should be solved. The exact dispositions of his troops at the moment the Staff Ride commences must be given to each commander in his special idea, so that he can issue comprehensive orders. For the purposes of the Staff Ride it is necessary that the exact hour when troops can be moved should be given, otherwise one or both commanders will probably commence with a night march. This introduces complications regarding the direction of the Staff Ride which it is advisable to postpone till the second or third day, as explained in Chapter VIII.

It is best to arrange that the troops on each side reach bivouacs, on the first night, out of touch with the enemy, with a prospect of being able to reconnoitre the ground on the *second* day, for the *third* day's operations, without being prevented by the enemy (p. 114).

Having completed the general idea and the special idea, Red, the special idea for Blue must then be worked up to

suit that of Red. During this process it may be found necessary to alter the Red special idea in order to obtain more suitable work for the officers on the Blue side. To ascertain if this is necessary, it is advisable to run through the events from the point of view of the Blue side (p. 121).

To ensure that the officer commanding each side will be likely to act so as to bring about a collision between the opposing forces, it is necessary to give each of them a definite object, but at the same time no instructions should be given as to the method of attaining this object (p. 122).

If a commander gets on wrong lines, and the operations in consequence are likely to afford little instruction, the directing staff, by means of the daily narrative, and keeping in mind the main objective given to each commander, must inform the commander that the methods he proposes are not approved by his imaginary superior, because they are at variance with his instructions, and that he must suggest an alternative course (p. 123).

The fact that the scheme has been worked out beforehand, and a probable course of events considered, will obviate many errors, and will disclose the probability or otherwise of the scheme producing an instructive situation. If this is not found to be the case, it is best to prepare a fresh scheme altogether; a patched-up scheme, or one twisted about to suit a class of operation different to what was originally intended, is rarely a success, and is usually fruitful in errors.

After the bivouacs of the main Blue army have been decided upon, and the work of the officers on the Blue side made to fit in with that on the Red, the special idea, Blue, can be completed (p. 125).

CHAPTER VII

THE PREPARATION OF SCHEMES TAKEN DIRECT FROM HISTORY

The second method of preparing schemes, mentioned in Chapter V., is perhaps more simple than the system of adopting purely imaginary situations. The officer who is preparing the general and special ideas is not required to describe an imaginary campaign and overcome the many difficulties which have been discussed already. He has merely to select a situation from history, where the forces employed on each side were similar to those required for the Staff Ride, and then transfer the actual position of the troops to the locality where it is proposed to hold the exercise.

A situation produced in this manner is not always strategically sound, though it is more easily described, and probably more interesting to officers who have studied the campaign, than a purely imaginary scheme. In real war commanders make mistakes, and these mistakes frequently take the form of unnecessary detachments, or of operations unskilfully conducted which lead up to the necessity for making detachments. If therefore a scheme is taken from history it may be discovered that the whole situation is based on bad strategy, and the officers under instruction may consider that the value of the exercise is materially reduced.

As, however, these somewhat false situations have arisen frequently in war, and may be encountered again in the

future, there is no serious objection to introducing them during a peace exercise, especially if the bad strategy on one side or the other is brought home to the officers. It is better, if possible, to select an example in which the strategy on at least one side is not open to serious criticism.

This method of preparing schemes is, however, subject to certain limitations, the most important being caused by the strategical effect of the physical features of a theatre of war on military operations. A mistake which is sometimes made, and which invariably spoils the Staff Ride, is to practise the operations of a detachment in country which is quite unsuited for the task carried out by the commander in the historical example.

For instance, in May 1862 General Jackson led a detachment against Milroy, who was advancing towards Staunton from the west, whilst Banks was threatening that town from the north (*see* Sketch No. 11). This operation depended for success on the physical features of the country —the Shenandoah valley, the Blue ridge, Massanutton and Shenandoah mountains—and on the bad roads, the paucity of railways, and the character of Jackson's opponents. Banks was cooped up in the Shenandoah valley, and Milroy in the mountains to the west of it, and this alone rendered it possible for Jackson to initiate and carry out his plan.

If this situation is transferred without consideration to the undulating plains of the Orange River Colony, it becomes absurd. Two small detachments are discovered wandering aimlessly about the veldt, each with its flanks unprotected, and each defending and attacking positions which might suit the operations of two or three army corps, but which are incapable of adaptation to the manœuvres of such small forces. History teaches us that when a detachment is made it must have ground to operate over suitable for its size. The only other alterna-

tives are retreat or the occupation of a hastily constructed entrenched camp. In the first case the detachment has probably done little to further the designs of the General who sent it out, and in the second case another detachment will probably be necessary to extricate the first.

Except in a war against indifferent troops, or to deceive the enemy, or for some other special purpose, detachments require some kind of physical obstacle to enable them to deal with any equal or superior force that they may encounter. As a rule this obstacle should run parallel or diagonal to the line of operations of the detachment, and not straight across its front.

For such a scheme it is essential that a locality be chosen for a Staff Ride where some physical obstacles actually exist, so that the reason for making the detachment is apparent and the operations of the detachment itself are possible. It is unnecessary, and even undesirable, to attempt to discover exactly similar ground. The chief obstacle may be a river instead of a line of hills; it may be differently placed as regards direction to the one in the historical example, but it must exist where the troops are supposed to be actually manœuvring.

There is no serious objection to the introduction of imaginary obstacles, provided they are situated outside the area of operations which is contemplated for the Staff Ride, but wherever officers are required to reconnoitre ground, the physical features of the country cannot be subject to any imaginary change without creating false situations and without losing the greater part of the instruction. For example, the Galty mountains could be taken to represent the Massanutton hills: they are both impassable for troops except at certain points, and any of Jackson's operations in the Shenandoah valley which were affected by the presence of the Massanutton range could

be reproduced in the neighbourhood of Mitchelstown or Kilmallock.

On the other hand, the Malvern hills would not be suitable, because troops can manœuvre over them with comparative ease, and any operations on the lower ground on either side would be completely dominated by these accessible hills. To overcome this difficulty it has been attempted sometimes to fix a line beyond which it is supposed that troops cannot move, but the situations produced in this manner are unreal and uninstructive.

The same does not apply to a river as an obstacle, because it is no great strain on the reconnoitring officer's imagination to suppose that the river is unfordable, and is sixty yards wide instead of ten or twenty. It would be just as difficult to force the passage or manœuvre on both banks in the one case as in the other. Even a small stream may be assumed to be a wide river, but it is better to avoid such imaginary enlargements if possible.

Outside the actual area of operations for the Staff Ride there is no objection to the creation of imaginary objects wherever they are required, but when this is done it is necessary to describe in the scheme the exact line beyond which no troops can manœuvre, otherwise strategical and tactical plans involving wide turning movements will be suggested by the officers taking part in the Staff Ride.

For example, it might be intended to hold a Staff Ride in the neighbourhood of the Galty mountains, and to take the scheme from the operations of Jackson at the end of May 1862, when he advanced down the Shenandoah valley against Banks (*see* Sketch No. 15). In this case the Knockmealdown and Kilworth mountains could be supposed to represent the Shenandoah mountain, the Galty mountains the Massanuttons; and it should be stated that a range of hills, representing the Blue Ridge, is supposed to exist to the north, and that no troops can

manœuvre north of the Cashel–Tipperary–Kilfinane road in consequence.

When the historical example is of the nature of an advance through a defile, such as the Austrian and Prussian operations at Trautenau or Nachod in 1866, or Kuroki's advance against the Mo-tien-Ling in 1904, it is essential to select some sort of a defile for the Staff Ride. That is to say, some locality where the operations on each side must be narrowed down, with a physical obstacle on each flank.

Having compared several historical examples with the ground that is available for the Staff Ride, and having selected one example as the most suitable to fit in with the physical features of the country, it is advisable to draw a skeleton map on a piece of tracing-paper of the country from which the example is taken, and on the same scale as the map of the country where the Staff Ride is to be held. This skeleton map would contain the important physical features and towns; it could be placed on the Staff Ride map and twisted about until there was some resemblance between the two.

Operations on a big river like the Danube, Po, Rhine, Elbe, Yalu, &c., could easily be duplicated on the Thames, Severn, Orange, Vaal, Ganges, Irrawaddy, &c. It is extraordinary how large towns, bridges, &c., can be found on the Staff Ride map which occupy much the same relative positions as those on the historical map. At this stage of the proceedings it would probably be necessary to introduce a few imaginary obstacles outside the actual area of operations, and possibly to reduce or increase the number of bridges over a river on the Staff Ride map. The position of the opposing forces on the selected date could then be placed on the Staff Ride map.

It is undesirable to adhere to the exact number or exact position of the troops in the example, and it should be

stated in the general idea that though the scheme is taken, say, from Jackson's operations at the end of May 1862, the exact number and position of the opposing forces has not been retained. Otherwise the officers taking part in the Staff Ride obtain more knowledge of the strength, dispositions, and intentions of their opponent than was possessed by the commanders in the historical parallel.

The object should be to bring the real campaign up to a certain date on the Staff Ride map, and then let the commander on each side solve the problem thus created. The solution must naturally be different to that in the example, because the ground is different.

The best method of explaining how these schemes can be prepared is to work out a definite example. We will suppose that the Staff Ride is to be held near Dublin, and that the idea is to use the Wicklow mountains to practise the operations of General Gourko against the Shipka Pass, immediately after the Russian passage of the Danube in 1877 (*see* Sketch No. 19).

It is necessary to have some idea of this nature to work on, because the scheme depends on the ground, and it is useless to devote several hours of labour in studying the details of an historical example only to find that the ground is quite unsuitable.

In this case a glance at the map shows that the two roads leading south-east over the Wicklow mountains from Blessington and Baltinglass can be taken to represent the Hankioi and Shipka Passes respectively. The Shannon is almost in exactly the right position to represent the Danube, and important Irish road-centres can be found to represent those in the actual theatre of war in Turkey. As the river Danube did not affect the operations of Gourko, the position of the Shannon is really immaterial, except that it makes the general scheme more realistic. Similarly the fact that the sea lies to the east of the Wicklow

mountains, instead of country like that beyond the Balkans, will not affect the actual operations practised during the Staff Ride.

It is necessary, first, to draw a sketch on tracing-paper of the country between the Balkans and the Danube, on the same scale as the map in use for preparing the scheme for the Staff Ride, usually ten or fifteen miles to the inch. A suitable date should then be selected to produce an interesting situation for the Staff Ride, and the strength and position of the Russian and Turkish troops on that date marked on the sketch. The sketch should only contain the important physical features, such as the Balkans, the Danube, and road-centres like Plevna, Tirnova, &c.

It is unnecessary to go into great detail as to the exact numbers of each detachment, because it is desirable to alter the numbers, and even the positions, of some of the troops to suit the requirement sof the Staff Ride; it is only the general situation which it is desired to reproduce.

In the present example July 12 appears to be a suitable date to commence with, but if it is subsequently found to be inconvenient we can select an earlier or later date. On July 12 the Russian and Turkish forces were disposed as follows:

RUSSIANS.

Gourko's detachment 8000 infantry, 4000 cavalry, 18 field and 14 mountain guns, at Tirnova.

The leading troops of the VIIIth Corps, marching from Sistova, had just reached Tirnova.

The IXth Corps was approaching Nikopolis, and arrived on the 13th in front of the Turkish position, which covered that town.

The XIIth and XIIIth Corps having crossed the Danube at Sistova were moving slowly east towards the river Lom to guard the Russian left flank.

The XIth Corps was crossing the Danube at Sistova, and was held in reserve together with the IVth Corps, which completed the passage of the Danube on July 30.

TURKS.

About 11,000 men were defending an entrenched position on the right bank of the Danube, round Nikopolis. These were defeated by the Russians on the 13th. Osman Pasha with about 50,000 men was about to start from Widin towards Plevna, which his advanced troops reached on the 19th, picking up some detachments from the troops defeated at Nikopolis on the way. (Total at Plevna on July 20, 15,000 men and 58 guns.)

Mehemet Ali with about 65,000 men was at Rasgrad. Sulieman Pasha with about 40,000 men was collecting his forces in Montenegro with the intention of embarking and ultimately advancing from the south towards Adrianople. His troops approached Eski Zagra on July 30.

In the Shipka Pass were 4000 infantry, some mountain guns and irregular cavalry. At Hankioi there were 300 infantry and some cavalry. At Tvarditza (Elena Pass) there were 1700 infantry. At Yeni Zagra about 1600 infantry, and at Kazanlik about 1700 infantry and a few guns. A total of about 10,000 men, with some guns and irregular cavalry. To the east of Tvarditza, holding the line of the Balkans, were 10,000 men and 40 guns.

General Gourko intended to send a detachment to attack the north end of the Shipka Pass on 17th, whilst he advanced *via* Hankioi and attacked the south end of the pass on the same day. The northern detachment attacked on 17th, but were repulsed. Gourko's detachment, delayed by the resistance of the Turks, was unable to attack till 18th; his attack also failed, but on 19th the Turks evacuated their position, dispersed in the mountains, and the Russians gained the pass.

If the sketch on tracing-paper is now placed over the map of Ireland and twisted about till the line of the Balkans coincides with the Wicklow mountains, suitable places in Ireland can at once be found to correspond with those on the sketch.

The Danube is represented by the Shannon; Sistova, where the Russian army crossed, by Banagher; Plevna by Thurles, both these being important road-centres; Tirnova by Kildare; Drenova by Athy; Gabrova by Tullow; the Shipka Pass by the Baltinglass–Tinahely road; the Hankioi Pass by the Blessington–Rathdrum road; Eski Zagra by Arklow; and Yeni Zagra by Wicklow.

The general and special ideas can at once be prepared, and might take the following form:

Ninth Division Staff Ride.
February 14 to 17.

The main idea for the scheme is taken from the operations of General Gourko against the Shipka Pass in July 1877, except that the exact numbers and positions of the troops is not adhered to.

General Idea.

1. On July 12 the Red army is crossing the Shannon at Banagher, a force estimated at about two divisions has moved south to attack a Blue entrenched camp round Killaloe, and a larger force, probably consisting of four or five divisions, is moving north-east. Another force, strength unknown, is marching from Banagher towards Kildare.

2. The Blue army has several divisions near Cavan. Blue troops are holding the line of the Wicklow mountains. A force of about three or four Blue divisions has been assembled near Cork, and may be expected to move north.

Killaloe is believed to be defended by about a division. The inhabitants east of the Shannon are friendly to Blue.

3. The sea on the west coast of Ireland is supposed to be country like that south of the Balkans. All other towns, physical features, railways, telegraph lines, &c., are to be taken as they actually exist in Ireland, except that the only road over the mountains between Dublin and New Ross, fitted for wheeled traffic, is that leading from Baltinglass to Tinahely. All other existing roads over these mountains are supposed to be tracks for about five miles on each side of the crest, and it would take at least thirty-six hours' hard work to make any one of these fit for field-guns. It is known that Red has captured a small amount of rolling stock, and that the railway from Banagher to Portarlington can easily be repaired. All other railways in the area occupied by Red are partially destroyed and will take several days to repair. The railways at Wicklow and Arklow are supposed to run in a north-easterly direction, some 180 miles to the Blue capital. Both the Red and Blue armies are organised in divisions similar to those described in our War Establishments.

The first paragraph of the general idea gives such general information about the Red army as it is likely that both sides would possess in real war, and which each side would know that the other was probably aware of. The strength of the Red force marching east from Banagher is not given, because Blue would be unlikely to know how many Red divisions had actually crossed the Shannon and how many had actually moved north and south, though some information, such as is given, would have been obtained from the inhabitants and from cavalry patrols.

The second paragraph contains general information about the Blue army. It is unnecessary, for the purposes

of the Staff Ride, which is only concerned with the operations of the detachment sent to capture the Hackerstown Pass, to give any reasons why the opposing armies are in this position; any information on this subject can be obtained by a study of the campaign. If a campaign is selected which is not well known by the officers taking part in the Staff Ride, it is desirable to issue a brief summary of the operations, together with a map showing all the places named in the summary. This paper could be issued some time before the Staff Ride is held, and should merely contain a diary of events from day to day. The diary should bring the narrative of the operations to within about two days of the commencement of the Staff Ride, and should then cease; otherwise the officers might assume that the subsequent events in the Staff Ride would follow the same course as in the real campaign, which is undesirable. It should be stated whether the inhabitants are friendly towards Red or Blue, because one side will thus gain better information than the other as to the localities held by hostile troops, though information from natives as regards the strength of the enemy is usually misleading.

Paragraph 3 demands the exercise of some imagination on the part of the officers. It is somewhat difficult to suppose that the sea is turned into dry land, but as no troops will be required to move over the sea during the Staff Ride, the assumption is not so bad as it appears at first. There will always be a weak point of this nature in any situation which is transferred from a theatre of war on the continent of Europe, in America, &c., to a small country like England or Ireland, where there is no place more than seventy or eighty miles from the coast-line. When the Staff Ride is held in larger countries like India, South Africa, Canada, or Australia, this difficulty sometimes disappears.

In the particular example under discussion it is necessary

to imagine that the land continues east of Wicklow, because otherwise the Red detachment after crossing the Wicklow mountains would have its outer flank protected by the sea. The nature of the operation is such that the officer commanding this detachment must advance straight along the shortest road to the Hackerstown Pass, and would only patrol towards Wicklow and Arklow. If it was desired to practise the operations of General Gourko after the Shipka Pass had been occupied by the Russians, then it would be better to twist the operation sketch completely round, so that the western slopes of the Wicklow mountains represented the southern slopes of the Balkans. In this case the operations would take place over ground sufficiently far from the summit of the Wicklow range to prohibit the assumption of the sea being dry land, because troops would be required to move over it. The transformation of the roads into mountain tracks will have the effect of delaying the advance of the Red detachment; this must be allowed for by the umpires during the Staff Ride.

The organisation of the opposing forces should be the same as that of the British Army at war strength, either in England, India, or the Colonies, according to the locality of the Staff Ride. This gives officers opportunities of familiarising themselves with the administrative portion of the field army, such as communications, the supply of food and ammunition, wastage of war in men and material, care and disposal of sick and wounded, postal, police, and other services, together with the organisation and defence of bases and lines of communication, civilian labour and transport.

The special ideas will complete the story for each side. The Red and Blue forces must be placed on the Irish map in the most suitable position for the commencement of the operations on the Staff Ride. This involves a decision as to where the officers are to stay, so that they will be near their work. The best headquarters for the Blue side, who

will be defending the passes of the Wicklow mountains, would be at Rathdrum. It is doubtful, however, whether suitable accommodation could be found there. Failing this, Wicklow would be suitable, using the railway as far as Rathdrum, and then bicycles, or employing motor-cars, though it is probable that the country roads in these hills are not very suitable for motors, or even for bicycles.

There is no reason why a camp should not be formed for the officers on each side, if the Staff Ride is held in the summer; this adds to the realism of the work, but also to the expense of the exercise. It is rare that the scheme, the ground, and the accommodation for officers can be made to fit in, and frequently the scheme suffers from a lack of local accommodation, which is undesirable. The amount of transport required to convey the tents, luggage, and food of a party of eight or nine officers is not very large, and as Dublin and the Curragh are so close at hand, it is possible that the transport could be obtained without any charge against the public. There is little doubt that a Staff Ride conducted from a camp is the most efficient method of any.

For the special idea, Red, it will be necessary to commence with a general statement regarding the plan of operations, then detail the strength of the detachment that is to be sent to capture the Hackerstown Pass, and finally prepare instructions for the officer commanding that detachment. The idea might take the following form:

SPECIAL IDEA, RED.

1. On July 12 the left wing of the army, consisting of four divisions and two cavalry brigades, is moving north towards Cavan, and has reached the line Mullingar–Ballymahon. Two divisions and one cavalry brigade, forming the right wing of the army, are marching

against a Blue force which is occupying an entrenched position on the left bank of the Shannon covering Killaloe. After defeating this Blue force the right wing is to occupy Thurles and guard the right flank of the army.

2. The 1st and 2nd divisions and the 9th cavalry brigade under General Ex are marching from Banagher on Kildare, and will be followed by the remaining five divisions of the army, which are about to commence the passage of the Shannon at Banagher.

3. The 1st division and the 9th cavalry brigade reach Kildare and the 2nd division Portarlington on the evening of July 12.

4. At 4 P.M. on 12th General Ex receives information from army headquarters that the Hackerstown Pass is held and strongly entrenched by Blue troops; this information is confirmed by reports from his own patrols.

5. He decides to endeavour to turn the pass by one of the mountain tracks with a portion of his force, and make a simultaneous attack upon it from the east and the west.

6. Sufficient rolling stock has been captured to forward supplies for General Ex's force by the railway from Banagher to Portarlington, which has been repaired as far as the latter place. Other railways in the area occupied by Red have been temporarily damaged.

This special idea is taken entirely from the history of the campaign, with a few alterations and modifications, especially as regards numbers. General Ex is given a free hand to turn the pass either on the south or the north, though he is unlikely to adopt the former course, as it would dangerously expose his line of communications through Portarlington; it would be a longer way round, and it is probable that his intention would be discovered and frustrated.

The officers on the Red side would be asked to appreciate the situation some days before the Staff Ride commenced, and when the commander's plan of operations is handed in, the troops can be placed in the position disclosed by his intentions, say on the evening of 13th or 14th, whichever date appeared most suitable, the operations commencing from that day. During the Staff Ride, the officer detailed to command would be given the detachment sent by General Ex to turn the pass on the east.

So little is known of the exact distribution of the Turkish forces in the Balkans that the special idea, Blue, must to some extent be invented. The following is suggested as a suitable scheme :

SPECIAL IDEA, BLUE.

1. On July 12 the Blue army is distributed as follows :

Four divisions and two cavalry brigades at Cavan.

A force consisting of two divisions and a cavalry brigade is expected to arrive from the east to assist in the defence of the Wicklow mountains in about a fortnight.

One infantry division is occupying an entrenched position on the left bank of the Shannon covering Killaloe.

Three infantry divisions and one cavalry brigade are expected to arrive at Thurles from Cork about July 20.

2. The Blue force defending the Wicklow mountains is distributed as follows :

Force under General Wye.

3rd cavalry brigade. One regiment at Stepaside, one regiment at Coolkenna Street, remainder Rathdrum.

5th division. 13th brigade and one field artillery brigade on the east side of the pass east of Blessington.

14th brigade and one field artillery brigade at Laragh.

Remainder of the division at Rathdrum.

The 18th brigade of the 6th division and one field artillery brigade holding an entrenched position facing west on the Hackerstown Pass.

Force under General Zed.

4th cavalry brigade. One regiment at New Ross, remainder at Newtown Barry.

6th division. 16th brigade and one field artillery brigade at Kiltealy, remainder (except troops detached to General Wye) at Enniscorthy.

3. Generals Wye and Zed are independent commanders, and each receive instructions direct from army headquarters at the Blue capital. These instructions are somewhat vague: General Wye is ordered to hold the Wicklow mountains from Stepaside to Coolkenna Street, both inclusive, and General Zed to continue the defence as far south as New Ross inclusive, until the arrival of the reinforcements from the east. It is not apparent that either commander can rely on the other for assistance if attacked.

4. General Wye's force receives supplies from the capital by rail through Wicklow to Rathdrum; General Zed is supplied in the same manner through Arklow to Enniscorthy.

5. General Wye has just been invalided, and his successor (the officer commanding on the Staff Ride), who arrives at Rathdrum at 4 P.M. on July 12, is of course at liberty to make any alterations in the disposition of his troops that he considers necessary.

6. General Wye's outposts west of the passes have everywhere observed hostile patrols during July 11 and 12. No hostile troops have been seen by General Zed's force.

Each officer on the Blue side would be called upon to write an appreciation of the situation as it appears to the

officer detailed to succeed General Wye at 4 P.M. on 12th. When the plan decided upon by the officer detailed to command General Wye's force during the Staff Ride is handed in, the troops can be placed in the position indicated by his intentions, say on the evening of 13th or 14th, whichever day appears to be most suitable for the commencement of the Staff Ride. See also the note to the same effect regarding the Red side. If the 13th is chosen for the Red, then the same date must of course be selected for Blue. The plans of each commander must be studied together, and a date selected which is likely to bring the opposing forces in contact during the period of the Staff Ride.

The officer commanding on the Blue side, knowing the plan adopted by General Gourko, will anticipate that an attempt will be made to turn the Hackerstown Pass by Red; but this fact would be equally apparent to him in real war, and in any case he would be unaware of the exact point where the attempt would be made.

Paragraph 1 of the special idea, Blue, dealing with the larger forces in the theatre of war, is taken from the actual events of the campaign, the numbers being approximate to those of the Turkish forces; all irregular troops, mounted and otherwise, being taken as regulars.

Paragraph 2 contains detailed information regarding the exact position of all the troops available for the operations on the Blue side. It is important that this should be given, because it enables the Blue commander and his staff to work out all the problems of time and space, and arrive at sound conclusions as to where it is possible to move his troops or to concentrate before finally deciding upon his plan of action.

Attention is invited to this matter, because the distribution of the troops is not always given in a scheme of this nature, and consequently the commander on a Staff Ride

must either work more in the dark than he would in real war, or else he assumes positions which are favourable to his plan and will simplify his task, but which will certainly impair the interest and value of the scheme.

Though the troops are not placed in the exact positions occupied by the Turks, their general scheme of defence, which involved the definite occupation of the passes, is adopted.

Paragraph 3 contains the instructions received by the Blue commander. These instructions are very vague, but as similar ambiguity is frequently encountered in war, it is desirable to practise it in peace.

Generals Wye and Zed are made independent of each other, because otherwise, when the Staff Ride commences, General Wye will at once call upon General Zed for reinforcements or assistance. This independence of command is unsound from a military point of view, but it is constantly met with in war. It gives General Wye's staff some extra work in keeping General Zed informed of the progress of the operations, and General Wye can still request General Zed to assist him, or arrange combined operations. During the Staff Ride General Zed will be represented by the assistant director on the Blue side, and he should take care to give General Wye, from time to time, all necessary information regarding the situation in front of General Zed, and any movement he is supposed to make. Some of this information is contained in paragraph 6 of the special idea, Blue.

Paragraph 4.—The method of supplying troops, either by rail, road, water, &c., or by a combination of any of them, should always be clearly stated in the scheme. It is unnecessary to give the locality of the capital, because it has nothing to do with the strategy of the operations. To carry out the historical parallel the capital, Constantinople, should be about Carlisle, but as the Irish sea inter-

venes between the Wicklow mountains and that town, it is better to say nothing about it.

Paragraph 5.—It is advisable to get rid of General Wye, because it may be presumed that he acquiesced in the dispersion of the troops under his command, and it is desirable that the Blue commander should have a free hand in disposing his troops according to his own ideas, so far as time will permit; but the directing staff should not allow any proposed movements to be made more rapidly than could be done in war.

Paragraph 6 contains the only recent information which the Blue commander would be likely to receive. In some cases the corps or division to which the hostile patrols belong may be given, but as descriptive numbers of the Red divisions have not been given in the general idea, it is useless to insert such information in this scheme.

It will be necessary to work out the details of the scheme and ascertain whether suitable instruction can be imparted to the officers on each side during the progress of the exercise. This can be done in the manner suggested for the imaginary scheme already described in Chapter V.

The scheme should also be worked out by two staff officers before it is issued, and the ground visited to ascertain that it is suitable for the purpose required.

The dates given in the general and special ideas having worked out in a satisfactory manner, they can now be changed to suit the dates selected for the Staff Ride. Thus July 12 becomes February 14, and all dates mentioned in the scheme must be altered accordingly.

CHAPTER VIII

METHOD OF DIRECTING A STAFF RIDE

COMBINED Training contains a list of all matters which require attention by the director and his assistants during a Staff Ride. If these instructions were properly carried out, the Staff Ride would go without a hitch. Sometimes, however, the directing staff do not realise the importance of some small point, neglect it, and then find that something has gone wrong.

It is advisable, therefore, to explain the reasons for each detail laid down in Combined Training, and point out the difficulties which ordinarily arise in the management of a Staff Ride, and how they can be overcome.

The work of the directing staff before the Staff Ride commences includes the following details:

(*a*) The preparation of the scheme, selection of ground, and accommodation of the officers. These must all go hand in hand. If a camp can be formed, the question of accommodation can be neglected, and the ground and scheme alone must be made to fit in with each other.

(*b*) Means of taking the officers on to the ground for work and bringing them back in the afternoon.

(*c*) The appointment of directors, assistant directors, and, if necessary, their staff. The selection of the commanders and staff officers to take part in the exercise.

(*d*) The issue of the general and special ideas and maps, with directions for the commanders to forward an appreciation of the situation some days before the Staff Ride

commences. If other officers are required to prepare an appreciation of the situation, their papers, as a rule, should also be handed in before the Staff Ride commences.

(*e*) The issue of orders regarding the place and hour of assembly; the dress to be worn; whether bicycles are to be taken; arrangements that have been made regarding accommodation; the adjustment of travelling claims; and a list of books, stationery, &c., that each officer should take with him.

(*f*) Any special instructions that it is considered desirable to issue to the assistant directors as to the method of conducting the Staff Ride, such as distribution of the directing staff, authority for hiring sitting-rooms, method and hours of communication between the director and the assistant directors, or between the commander on each side and any detached commander, method of preparing the daily narrative, system of examining and commenting upon the work done by the officers, and whether the assistant directors are to forward this work for inspection by the director after it has been dealt with at the evening conference.

We will suppose, as an example, that it has been decided to hold a Staff Ride near Tipperary, that the scheme described in Chapter V. has been prepared, that it has been ascertained that suitable accommodation exists for the officers on the Blue side at Tipperary, and those on the Red side at Caher or Mitchelstown, and that a limited number of motor-cars have been obtained to take officers on to the ground each day. The following orders could then be issued:

NINTH DIVISION STAFF RIDE.
June 15 to 19.

INSTRUCTIONS TO OFFICERS, RED.

1. The general idea and special idea, Red, are forwarded

herewith, together with the necessary maps, which latter will be returned at the conclusion of the Staff Ride.

2. All officers are required to write an appreciation of the situation from the point of view of the officer commanding the Red force which is detached towards Caher. These appreciations will be forwarded direct to the headquarters, 8th division, by June 10.

3. The Red side will be composed as follows:

G.O.C. Red detached force .	A Brigadier-General.
Staff Officer, General Staff .	A Brigade Major.
D.A.A. and Q.M.G. . .	A Brigade Major.
Commanding Cavalry Brigade	A Cavalry Officer.
Commanding 8th Division .	A Colonel.
Staff Officer	A Staff College Officer.
Commanding Artillery . .	An Artillery Officer.

4. The officers will assemble at the —— Hotel, Caher, at 5 P.M. on June 15, and report to the assistant director, Red. Officers will bring with them a copy of Combined Training and of Infantry, Artillery, or Cavalry Training, according to the arm to which they belong, also note-books and materials for making a rough sketch or enlargement of a map.

5. One motor will be provided for the G.O.C. Red force and staff, and one motor to take the remaining officers on to the ground each day for reconnaissance work. The assistant director, Red, will issue a time-table each evening, showing the movements of the last named motor.

6. Officers will wear uniform (or plain clothes); mess dress will not be taken. Bicycles can be taken by those officers who possess them, and will probably be found convenient, as they will then be independent of the motor.

7. Accommodation has been arranged at the —— Hotel, Caher, for all officers at an inclusive charge of 11*s.* a day. A sitting-room will be provided for the officers to work in, and for the conferences.

8. The Staff Ride will conclude at 2 P.M. (or to suit convenient trains) on June 18.

9. Travelling claims, including the usual allowances, will be sent in at the termination of the Staff Ride.

10. The diary of work during the Staff Ride is attached.

Similar instructions would be issued to the officers on the Blue side, who could assemble at Tipperary.

It is assumed that there is a brigadier-general acting as assistant director with each force; that the director, who would be the major-general commanding the division, takes the officers on the Red side to carry out a tactical exercise on the ground on 17th, and the officers of the Blue force to do a similar exercise on 18th, and the officers of both sides on 19th. Officers get tired of continual reconnaissance work, and these tactical exercises on the ground when properly conducted are highly instructive. Suggestions for carrying out such exercises are contained in Chapter XVIII. The colonel, general staff, would probably assist the director.

The following commanders and staff officers are available in a division to take part in the Staff Ride: One major-general, four brigadier-generals, one colonel, general staff, one D.A.A. and Q.M.G., three brigade majors, one staff captain R.A., one O.C., R.E., and one O.C., A.S.C.

So far employment has been found for all except one brigadier, one D.A.A. and Q.M.G., one brigade major, one R.E., and one A.S.C. officer, and one staff captain R.A. These, with a cavalry officer and one or two specially selected officers, would be employed with the Blue force. If it is thought necessary, an artillery officer can be attached to the staff of the director and of each of the assistant directors. They can help with the work, and they will learn a good deal. It is also desirable to attach

a medical officer and a supply officer to the staff of the director, to assist him when criticising technical details. The following diary of work will give an idea of what is required:

NINTH DIVISION STAFF RIDE.

June 15 to 19.

DIARY OF WORK, RED.

June 15.—Officers assemble at 5 P.M. The Red commander will issue orders for any movements on June 16, and will then prepare his written instructions for such reconnaissance work as he requires each officer on the Red side to perform on 16th. The detail of work to be done during the evening by the remainder of the officers will be issued by the assistant director at 5 P.M. A conference on the appreciations previously handed in will be held at 9 P.M.

After the conference the Red commander will issue to each officer his instructions for the reconnaissance work on 16th.

June 16.—The officers will proceed to the ground and execute their reconnaissances, returning to the hotel by 5 P.M., when all work must be handed in to the assistant director. The narrative of events during the day up to 5 P.M. will be issued by the assistant director to all officers at that hour, together with the detail of work to be done during the evening. This work will be handed in to the assistant director at the commencement of the evening conference at 9.30 P.M. The G.O.C. Red force will return to the hotel at 3.30 P.M. each day, when the assistant director will hand him the 5 P.M. narrative to enable him to get his orders ready for issue to the other officers when they come in at 5 P.M., and thus obviate a long delay.

Dinner will be at 7.30 P.M. A conference dealing with the orders, &c., written on the evening of 15th, and with the reconnaissance work done during the 16th, will be held by the assistant director at 9.30 P.M. No instructions for

reconnaissance will be issued, because on 17th the director will conduct a tactical exercise on the ground with the officers of the Red force, who will be ordered to meet the director at —— at 10 A.M. on 17th (or any convenient hour).

June 17.—Officers will return to their hotel by 5 P.M., when the narrative of events up to that hour and the detail of work to be done during the evening will be issued by the assistant director. A conference will be held at 9.30 P.M. by the assistant director, dealing with the work done on the evening of the 16th. The director will then discuss with the officers the most important tactical points which were dealt with during the tactical exercise on the ground. All work done during the evening will be handed to the assistant director before the conference. Instructions for reconnaissance work on 18th will have been previously prepared by the assistant director or the G.O.C. Red force, and will be issued to all officers at the close of the conference.

June 18.—The officers will carry out their reconnaissance work on the ground and hand it in to the assistant director at 5 P.M., when the narrative of events up to that hour will be issued, together with the detail of the work for the evening. A conference will be held by the assistant director at 9.30 P.M., dealing with the work done on the evening of the 17th and with the reconnaissance work on the 18th. All work done during the evening will be handed to the assistant director before the conference. Officers will be ordered to meet the director at —— at 10 A.M. on 19th to carry out a tactical exercise on the ground, together with the officers on the Blue side Officers will be able to leave Tipperary by the — P.M. train on 19th.

The above is only intended as a general guide. Local circumstances and the nature of the scheme would no doubt

necessitate some alterations, but all details regarding the issue of the narrative, instructions for the work each evening, and written instructions for reconnaissance next day should be rigidly adhered to. It is most important that everything should be done methodically, otherwise delays occur, officers will be left with nothing to do, and will get bored in consequence.

The detail of work to be done each evening should, as a rule, be prepared and issued by the assistant director, and not by the G.O.C. Red force, who has plenty of other work to do.

Chapter XI. contains a list of different types of work which are suitable for the evening, and which do not require very careful reconnaissance of ground beforehand. Sample copies of instructions to officers for various kinds of reconnaissance work on the ground are also included in the above mentioned chapter.

A similar diary should be prepared for the Blue side, with the necessary alterations. If it is considered desirable, a separate diary of work can be prepared and issued to the directing staff. For the above-mentioned scheme this diary might take the following form :

NINTH DIVISION STAFF RIDE.
June 15 to 19.

INSTRUCTIONS TO ASSISTANT DIRECTORS.

1. The directing staff will be composed of the following officers :

Director	The Major-General commanding.
Staff Officer	The Colonel, General Staff.
Assistant Director, Red .	A Brigadier-General.
Staff Officer	Selected regimental officer from the division.
Assistant Director, Blue.	A Brigadier-General.
Staff Officer	As for Red.

2. The general and special idea, Red, is forwarded herewith to the assistant director, Red, and the general and special idea, Blue, is forwarded to the assistant director, Blue. Each will appreciate the situation, and will meet the director at 10 A.M. on June 1, when the scheme will be worked out on the map. The director will then discuss the strategical and tactical points raised during the process, and by that means sound rulings can be arrived at as to the line to be taken when, later on, the work of the officers has to be dealt with. This will avoid any clashing of views between the director and the assistant directors.

3. During the Staff Ride assistant directors will obtain from the commander of their side a copy of his orders for the next day's operations, as soon as he has prepared them. This copy should be sent to the director so as to reach him before 9 A.M. on the following day, or on the same evening if possible, to enable him to prepare the narrative which has to be issued at 5 P.M. on the following day. If there is any doubt as to these orders reaching the director in time, a summary of the intentions of each commander, and of the proposed movements, should be telegraphed to the director.

4. If either commander desires to carry out any night operations, the fact must be telegraphed to the director at once. The director will then ascertain the intentions of the other commander, and will telegraph a brief narrative giving the results of these night operations. This narrative, if it arrives in time, may be issued to the commander the same night, after the evening conference, and when all the orders for the night operations have been handed in. If it is impossible to send this narrative so early, it will be sent so as to reach the assistant director early on the morning following the night operations. The assistant director will then issue this narrative to the officers

before they go out on the ground, and the necessary orders for the day's operations must at once be prepared by the commander, and telegraphed to the director, so that the latter may prepare the usual narrative which is issued at 5 P.M. daily.

5. Night operations on a Staff Ride are not very instructive; commanders are inclined to move troops with a celerity and audacity which is not found in war, and consequently they should, as a rule, be discouraged. It is, however, frequently necessary to move troops at night from one part of a battle-field to another, to withdraw after a severe engagement, to get into position for an attack at dawn, or for some similar reason. When the situation demands such a move, and the commander desires it, the procedure mentioned in paragraph 4 should be followed.

6. The director will remain with the Blue side and attend the conferences on that side during June 15 and 16.

He will conduct a tactical exercise on the ground with the officers on the Red side, and attend the conference on that side on 17th. He will conduct a similar exercise with the officers on the Blue side on 18th, being present at the evening conference. On 19th he will meet all the officers, and, after studying the final situation on the ground, will discuss any strategical and tactical points which may be brought forward by the assistant directors, or the officers taking part in the Ride, and endeavour to indicate the principles contained in the authorised books on training which apply to such matters.

7. All work done by the commander on each side will be forwarded as early as possible to the director, who will examine and criticise it, and then return it to the officer concerned. All work done by the remainder of the officers will be examined and criticised by the assistant directors, and returned each day to the officers just before

the evening conference. It is most important that the work done on the previous evening and during the day should be discussed at the conference held each night.

8. The instructions for reconnaissance on the ground can, if desired, be prepared by the commanders, and issued to the officers after being seen by the assistant directors. The latter should, if necessary, assist the commanders in preparing these instructions, because it is very important that the officers who are sent out to work on the ground should have sufficient information regarding the intention of the commander to enable them to fully grasp the situation and work with the one object in view, and not on generalities.

Five P.M. is a good hour to commence the Staff Ride; it gives officers plenty of time to reach the place of assembly and get comfortably settled before the work commences. If the Staff Ride begins in the morning, officers must either assemble the night before and find nothing for them to do, or else they arrive too late on the ground to complete a fair day's work. On active service staff officers will be called upon to carry out a reconnaissance at any hour of the day, but for instructional purposes, and when the work has to be carefully studied and commented upon by the directing staff, ample time for both should be allowed.

It is convenient sometimes to allow an interval of time to elapse between the date of the situation which is to be appreciated by the commanders and the date of assembly for the Staff Ride, the movements in the interim being made by the director in conformity with the plans of the commanders. In a strategical situation the main solution of the problem is dealt with when the opposing forces are some distance apart. The commander on each side must at least decide before he moves his force the direction he will take. This decision in real war will be

arrived at, not as a rule by inspecting the ground, but by reading intelligence reports on the theatre of war and by a careful study of the map. This can be done satisfactorily in quarters, before the commencement of the Staff Ride, and will enable the whole period during the Staff Ride to be devoted to a study of the ground.

When the scheme for a Staff Ride deals with operations at the commencement of a campaign, or when the opposing forces are a long way apart, it is necessary to adopt this method, and to issue the general and special ideas about a fortnight before the date fixed for the Staff Ride.

The scheme will give the position of the troops, and the information available, on a date anterior to the commencement of the Ride. The officers will appreciate this situation and forward their work to the director four or five days before the date of assembly for the Ride. The director will then compare the intentions of the opposing commanders, move the troops on the map in accordance with those intentions, and decide upon the position which is reached by each force at 5 P.M. on the date when the Staff Ride commences. He will then prepare a narrative describing the events which have occurred in the interim.

This system of moving the troops introduces complications, and is open to some objections, but as it has been so frequently adopted, it is as well to explain it more fully and endeavour to remove any serious drawbacks.

The date when the scheme is issued should not be confused with the date of the commencement of the operations or that fixed for the Staff Ride. To avoid this confusion it is best to take a definite example. We will suppose that in the original scheme which is to be issued to the officers the date of the situation is May 10. On this date we will assume that the opposing forces are fourteen days' march apart, and if they both advance towards

each other they will meet in seven days. Or perhaps one force may be halted and the other advancing, in which case they would meet in fourteen days.

We will suppose, further, that the director has fixed the date of the Staff Ride at 5 P.M. on May 17, and he wishes the cavalry patrols on each side to be in touch with each other at that hour. He will then work backwards to the *place* where the troops are first located in the scheme, and calculate the number of days that should elapse to allow the necessary movements to be made. This will fix the *date* of the situation given in the scheme. Assuming that it will take seven days for these movements to be made, the last-mentioned date will be 5 P.M. on May 10, and the scheme should be prepared accordingly.

There is no occasion for the director to actually issue the general and special ideas on May 10; it would be better to send them to the officers about May 3, and they will then have plenty of time to study the situation, and can return their work to the director by May 12. This will give five days to look over the work.

The director having compared the intentions of the opposing commanders, will move the troops on the map from 5 P.M. on 10th to 5 P.M. on 17th. He will then write a narrative describing the new situation on the latter date, and relating the events that have occurred, and the information each commander would have obtained, since 5 P.M. on 10th May. This narrative is issued to the officers when they assemble at 5 P.M. on May 17.

The chief reason why this method is so often adopted is because the schemes for Staff Rides in the past have so frequently dealt with the commencement of the campaign instead of the middle of it. It has already been pointed out in Chapter III. that detachments at the commencement of a campaign are open to serious strategical objections, and that it is better to select a later period when

detachments are often necessary. Another and better reason for adopting the above method is that the commanders on each side are given a freer hand and more scope for practice in strategy; and a still better reason is that if the opposing forces are in touch at the commencement of the Staff Ride, there is no strategical work for the cavalry to do.

It would appear, therefore, that the best situation to produce at 5 P.M. on the first day is for the cavalry patrols on each side to be in touch with each other, and for the opposing forces to be about four days' march apart. There is, however, a drawback to this arrangement, because it is undesirable for a Staff Ride to last more than three or four working days. If the cavalry patrols are to be in touch on the evening of the first day, the opposing forces must naturally be at least six days' march apart, because the main body of the cavalry will probably be ten miles behind the patrols of the advanced squadrons, and the main infantry force on each side will probably be two days' march behind the cavalry. This would mean that the main forces would not be in contact till the evening of the fourth day of the Staff Ride.

The fact is that the strategical action of the cavalry cannot be practised at the same time as the tactical operations of the main opposing forces, and as we want to practise tactics more than strategy in a divisional Staff Ride, it is better to omit the strategical action of the cavalry, or deal with it on paper in the manner suggested above before the Staff Ride commences.

For instance, with the dates given above the opposing cavalry on 18th and 19th would be operating against each other, and on the evening of 20th they would have to draw off to a flank, because the opposing infantry would be in touch. It would be better, therefore, to commence a cavalry Staff Ride at 5 P.M. on 17th and conclude it on

20th, but to commence a divisional Staff Ride at 5 P.M. on 19th and close it at mid-day on 23rd.

For a divisional Staff Ride, therefore, the strategical plans of the opposing commanders, and the strategical action of the cavalry, can be dealt with on paper, and the Staff Ride can commence at 5 P.M. on 19th, the narrative being brought up to that date. This would enable officers to reconnoitre ground on 20th for the action of the main body on 21st, and several instructive tactical situations would be produced during 21st, 22nd, and 23rd.

It will be observed that the schemes worked out in Chapters V. and VII. commence when the opposing infantry are comparatively close to each other, and that there is little scope for the strategical action of cavalry, as regards the preliminary operations, though there is plenty of work for the cavalry to do whilst the infantry are manœuvring and fighting.

The duties of an assistant director during a Staff Ride can now be summarised.

The work on the first evening will depend on three alternatives:

(*a*) If the scheme is issued for the first time when the officers assemble.

(*b*) If it has been issued previously and with reference to a date anterior to that of the commencement of the Staff Ride, and the troops have subsequently been moved by the director in accordance with the intentions of the opposing commanders, and a new narrative up to 5 P.M. has been prepared.

(*c*) If it has been issued previously and prepared with reference to the exact date of the commencement of the Staff Ride.

Of these (*b*) or (*c*) is better than (*a*), as already pointed out.

In the first case the assistant director will issue the

detail of work to be done during the evening by all officers, including the commander. The officers will then be busy all the evening writing appreciations of the situation, preparing orders, &c. There will be no conference, because no work will have been handed in.

In the second case (*b*) the assistant director will issue at 5 P.M. the narrative of events up to that hour, together with the detail of work to be done during the evening. A conference on the appreciations and orders previously handed in will be held at 9 P.M.

In the third case (*c*) there will be no narrative to issue, because the situation originally given in the general and special ideas was dated 5 P.M. on the first evening of the Staff Ride. There will be no work for the officers to do as regards appreciations and orders, because these will have been written previously, and will form the subject for the evening conference. The assistant director, therefore, should select other work for the officers to do during the evening, having regard to the military requirements of the situation. Suggestions for suitable problems will be found in Chapter XI. The narrative to be issued at 5 P.M. on the following day will have been prepared already by the director.

In the first and second cases the assistant director must obtain copies of the orders of the commander, and send or telegraph them to the director as soon as possible. If the commander intends to carry out any night operations, the assistant director will at once wire all necessary details to the director as early as possible.

In the second and third cases, as all the work regarding appreciations and orders will have been forwarded to the director some days before the Staff Ride commences, the assistant director will have received and criticised it, and extracted notes for the evening conference.

In either cases (*a*), (*b*), or (*c*) the written instructions for reconnaissance work on the following day must be prepared

by the commander, or by the assistant director, and issued to the officers after the evening conference, or when the evening's work is completed.

Work on the Second Day.

Before going on to the ground the assistant director should look over about half the work done on the previous evening, criticise it, and extract notes for the conference in the evening. He should then visit all the ground where the officers are reconnoitring, or, if that is impossible, at least the most important areas should be examined. Reconnaissance work cannot be adequately criticised unless the ground has been carefully studied from the point of view of the particular task in hand.

The assistant director must return to his headquarters by 3 P.M. at the latest, so as to issue the narrative which he should find awaiting him to the commander of the force. From 3 P.M. to 5 P.M. he can prepare the detail of the evening work for the officers, and complete his examination of the work done during the previous evening; at 5 P.M. he should issue the detail of work for the evening and despatch the operation orders of the commander to the director, to enable the latter to prepare the narrative for the next day. From 5 P.M. to 9.30 P.M. he should examine the reconnaissance work done during the day, extracting notes for the evening conference. If further reconnaissance is to be done on the third day, he must ensure that the written instructions for the officers are ready for issue after the conference.

The assistant director's work on the third and fourth day is similar in all respects to that on the second day. It should be clearly understood that a Staff Ride day really commences at 5 P.M. one day and ends at 5 P.M. the following day. All work done between these hours is dealt with at the evening conference on the latter day.

On the third or fourth day it is probable that the work will be varied, and instead of the officers being sent out individually to reconnoitre, they will be taken, either by the director or assistant director, to work out a series of tactical situations on the ground. This will cause a slight variation in the above summary of work.

No instructions for reconnaissance will be prepared the evening before, and instead of the reconnaissance work the written solutions of the various problems will be handed in to the assistant director for criticism on return to the hotel. During the tactical exercise the assistant director should make notes of all important strategical, tactical, and administrative points which have arisen during the day, and deal with them in detail at the evening conference. The method of conducting these exercises is fully explained in Chapter XVIII.

On the last day, the fourth or fifth, whichever it may be, it is undesirable to do any reconnaissance work, because it cannot be looked over and discussed before the end of the Staff Ride. It is best, therefore, for the assistant director on one side and for the director on the other to take the officers on to the ground and work out the tactical details of the final situation. If desired the director can take out the whole of the officers and study the final operations of one side, preferably an attack.

In either case there should be a short conference on the ground before the officers disperse, when the director will indicate the excellence of certain plans adopted and the undesirability of others, and should endeavour to give rulings, not as to which commander has beaten the other, but as to the probable result of definite movements made and decisions arrived at by the various officers. Notes for this and other conferences will be found in Chapter XIII.

On some Staff Rides the instructions for reconnaissance of ground have been prepared by the assistant director

instead of by the commander of the force. Though in principle it is open to objection, there is no harm in adopting this system. The commander naturally becomes absorbed in the actual operations, to which he will attach more importance than to the necessity for detailed reconnaissance of ground, which will not appeal to him on a Staff Ride in the same manner as in war. If this method is adopted, the assistant director must ascertain from the commander what reconnaissance work he wishes to be done, and may even suggest administrative and tactical problems which would require to be worked out on the ground in a similar situation in a real war. The importance of giving full instructions to officers who are sent to reconnoitre ground is dealt with in Chapter XI.

It is desirable that the evening work of the officers should be completed by the time fixed for the conference. The officers can then assemble for the conference knowing that they have no more work to do and can pay full attention to the discussions which take place. There is no object in overworking them, and if full value is to be obtained from the conference, it is necessary that they should have an opportunity of subsequently discussing amongst themselves the points which have been raised and the criticisms made by the assistant director during the conference. During these arguments each officer will prove no doubt that he was right and the instructor was wrong, but at the same time, if the particular criticism was sound, the officer will remember it, and will not repeat the error.

The value of these post-conference discussions cannot be overrated. Officers learn quite as much from them as from the conferences themselves—in fact, the extent of the instruction imparted can frequently be gauged by the amount of discussion which takes place amongst the officers themselves.

It is desirable for all officers, except the chief staff officer

to the commander on each side, to prepare an appreciation of the original situation. It makes them study the scheme carefully, and it gives them increased interest in the subsequent operations. Although the daily narrative is issued at 5 P.M., there is no reason why it should not include all information which would be likely to reach the commander on each side by a later hour, say 9 P.M. Narratives should be made up to a time when there is a temporary cessation of the main operations, which is usually in the evening, when the troops are seeking rest for the night. As already explained, if night operations are undertaken a special narrative must be issued to the officers before 9 A.M. the following day, so that every one will know what has happened during the night.

It is very important that the orders of each commander should be forwarded to the director so as to reach him by 9 A.M. the following day at the latest. If this is not done, he is unable to prepare the narrative for each side and despatch it in time to reach the assistant director by 3 P.M. The commander on each side is unable to write his orders, and the work is at a standstill till the narrative arrives.

It is desirable that the work done by the commander on each side should be sent to the director, who will criticise it and return it to the commander. One officer, though senior to the other, hardly cares to criticise the work of an officer of the same rank. All other work must be dealt with by the assistant director on each side.

The summary of the duties of an assistant director on one side apply equally to the other side. The only difference is that the director will always be present with one side, and the assistant director on that side, instead of telegraphing or sending the work, orders, &c., done by the commander, can hand it to him. The director also will probably hold the conference on the side which he has joined.

The duties of a director have been indicated to some extent already. They may be summarised as follows, assuming that on the first day of the Staff Ride the director joins the Blue force:

First day.—In case (*c*) the officers will have appreciated the situation which was dated 5 P.M. on the first day of the Ride, and will have written orders for the operations on the second day. The director, who has seen all this work before the Staff Ride commenced, will have prepared the narrative to be issued at 5 P.M. on the second day. The director therefore will merely hold the conference on the Blue side and deal with the above-mentioned work.

In case (*a*) the officers have not seen the scheme before, and in case (*b*) they have not seen the new situation, so in both cases they will be busy during the evening writing appreciations, orders, &c. In case (*a*) there will be no conference, because no work will have been handed in, but in case (*b*) the director can hold the conference on the Blue side and deal with the original work which was handed in before the Staff Ride commenced.

Second day.—In case (*c*) the narrative to be issued at 5 P.M. will have been prepared beforehand.

In cases (*a*) and (*b*) the director will have seen the orders on the Blue side, and he will receive those of the Red commander before 9 A.M. The director's staff officer should then draw on the map the position of all the opposing forces, as if each commander's intentions could be carried out.

It will be found probably that some parts of the opposing forces have met and overlapped: in that case the director, studying the orders of each commander, will decide what has happened; he will then prepare narratives describing all the events that have occurred, giving the information which each commander would be likely to have obtained during the operations, and stating the exact

distribution of each force at 5 P.M. on the second day, or if desired at a later hour; but in any case the narrative must be issued to the officers at 5 P.M. on the second day, to enable them to get on with their evening work.

Two narratives will be required, one for Red and one for Blue, because the information given to one commander and the exact position of his troops would not necessarily be known to the other commander. Notes on the preparation of narratives will be found in Chapter XII.

Having completed the narrative, the director should go on the ground and study it from the point of view of each commander, so that he will be in a position to appreciate their plans and orders. He should then return to his headquarters, and having criticised the work done on the previous evening by each commander, he will send it back in time for the evening conference. During the evening he can look over some of the work which has been dealt with by the assistant director on the Blue side, and make further remarks on it, or initial those made by the assistant director. It encourages officers to know that some of their work will be seen by the director himself.

Third day.—The narratives to be issued at 5 P.M. must be prepared by the director before he goes on to the ground, and sent off to the assistant directors. To carry out the programme already suggested, the director will move his headquarters to the Red side; he will meet the officers on that side at a certain time and place, previously arranged, and will conduct a tactical exercise on the ground. At the conclusion of the exercise the director will proceed to the headquarters of the Red side and hold the conference there in the evening.

Fourth day.—The narratives must be prepared as above, and if we continue with the previously suggested programme the director will meet the officers on the Blue side and conduct a tactical exercise on the ground, as on

the third day. During the morning of the fifth day, according to the above programme, the director meets all the officers and studies the final situation on the ground.

One tactical exercise on the ground is generally sufficient for each side, and it is more instructive to carry out an attack than to study a defensive position, though the latter is also useful. The side which is not engaged in a tactical exercise will be doing the ordinary reconnaissance work. The director would arrange his tactical exercises for each side according to the nature of the operations. The object would be to work out on one side any interesting tactical situation which may arise. For example, the Blue might be attacking on the third day, and the Red drawing off after an unsuccessful battle on the fourth day, in which case the director would have his tactical exercise with Blue on the third day and with Red on the fourth day.

CHAPTER IX

STAFF RIDES WHEN ONLY ONE SIDE IS REPRESENTED BY A PARTY OF OFFICERS

THERE is little doubt that officers take more interest in the strategical work when they know that the enemy is represented by another party of officers, but it is quite possible, and in some cases desirable, to hold what is frequently called a "single" Staff Ride, where only one side is represented by a party of officers, and where all the movements of the enemy are decided by the director.

There is one pitfall to be avoided. The director is very apt to make the enemy do whatever is most difficult for the officers to deal with, and sometimes this is so marked that the officers get disheartened and lose interest in the work. It is very easy for a director, when he has seen the plans and orders of the officers under instruction, to completely defeat them by causing the enemy to adopt a certain course of action. The only way to overcome all temptation to do this is to decide beforehand the action which is to be taken by the enemy, and in any case of doubt to favour the officers rather than the enemy.

If the officer commanding the side makes a good plan and carries it through with vigour and determination, he should be given full credit for his work, and the director can rule that the enemy is defeated. If, on the other hand, the officer commanding the side makes an indifferent plan and carries it out with hesitation or vacillation, the director can give the imaginary hostile commander credit

for acting in a capable manner, and can decide that he is successful.

It is easy to conduct a single Staff Ride: one director only is required, and, if he is assisted by a staff officer, no assistant directors are necessary. There is no transmission of plans and orders between the assistant directors and the directors. It is easy to prepare the narratives and keep everything up to date, and for these reasons it is probable that the actual instruction imparted to the officers is better during a single Staff Ride than when both sides are represented by officers, and where the director and assistant directors have a great deal of work in connection with the conduct of the operations in addition to the work of instruction.

A single Staff Ride is peculiarly suited for instructing the officers of a comparatively small force such as an infantry or cavalry brigade, or the artillery of a division. In the case of an infantry brigade it is essential that the services of a major or captain of artillery should be obtained to command the artillery: this can easily be arranged in most commands. Staff Rides in which the officers of one arm only take part are not nearly so instructive as when the officers of two or three arms are assembled and those of each are learning a good deal about the other.

The method of conducting the Ride is exactly the same as already described in Chapter VIII., except that everything which refers to the transmission of orders, &c., between the director and the assistant directors can be omitted, because the director is on the spot and no assistant directors are required. The preparation of the scheme is also the same. A special idea should be written for the enemy, in spite of the fact that no officers are on that side. When the general and special ideas have been prepared the operations should be worked out by two

officers, one for the Red side and one for the Blue side. This will disclose any mistakes in the scheme, and will also give the director a line to adopt when deciding upon the action to be taken by the enemy. If desired, the officer who works out the enemy's side can continue to act for the enemy throughout the Staff Ride, but in that case he must not be shown the special idea on the other side, and he must be given every day a narrative of events so far as they would be known to him in war, and must not see the narrative issued to the other side. This means that he will be isolated from the rest of the officers during the Staff Ride and will have rather a dull time, and the director will have to prepare two narratives every day instead of one. At the same time, the temptation to make the enemy do things to checkmate the action of the officer commanding the other side will be removed.

At the commencement of the Staff Ride the officers should be informed either that the enemy is represented by another officer who is entirely independent of the director as regards the action taken, or that the enemy's plans have been already decided upon and will not be altered. They should also be told that these plans have already been typed and will be issued to the officers at the termination of the Staff Ride. This will create a feeling of confidence in the officers, who will know that they have a fair course in front of them and will only be required to overcome the difficulties which must arise in every operation of war.

The method of preparing the scheme and conducting the exercise can be illustrated from the general and special ideas given in Chapter V., making the two opposing detachments somewhat smaller. The general idea can remain the same. Paragraph 3 of the special idea, Red, can be altered to read "the 24th infantry brigade, 30th field artillery brigade, and 7th Hussars, under the

General officer commanding 24th brigade," and in the second sentence "this brigade has been holding" can be altered to "this regiment has been watching." In paragraph 5 the detachment at Ballylanders Pass can be omitted.

Paragraph 4 of the special idea, Blue, can be altered to read "the 52nd and 53rd infantry brigades, the 59th field artillery brigade, 101st howitzer brigade, and 51st field company of engineers, all of the 18th division with the 3rd and 4th Lancers, the whole under the general officer commanding the 18th division."

The last part of paragraph 6 can be altered to read "the 53rd brigade was mostly in reserve."

We will suppose that the officers are to be on the Red side and that the operations of the enemy are to be conducted by the director. The orders to the officer commanding the Blue detachment are quite clear, so it is not difficult for the director to produce a series of situations and decide beforehand on the action of the enemy, Blue. The officers on the Red side could assemble at Caher at 5 P.M. on the 15th; they could be employed during the 16th in reconnoitring a defensive position near Caher for occupation by the Red detachment, arranging outposts, bivouacs, reconnoitring the line of retreat on Mitchelstown, &c.

The narrative issued on the evening of the 16th to the officers on the Red side would disclose the fact that the 7th Hussars had lost ground during the day and that an attack by Blue might be expected on the 17th; *vide* Chapter XII., Preparation of Narratives.

On the Blue side the director can decide beforehand how the Blue commander will deliver his attack. For example, it may be laid down that a frontal attack is to be made along a certain extent of front, and that the main attack is to be delivered against the right flank of the Red position, wherever it may be. This of course is a purely

officers, one for the Red side and one for the Blue side. This will disclose any mistakes in the scheme, and will also give the director a line to adopt when deciding upon the action to be taken by the enemy. If desired, the officer who works out the enemy's side can continue to act for the enemy throughout the Staff Ride, but in that case he must not be shown the special idea on the other side, and he must be given every day a narrative of events so far as they would be known to him in war, and must not see the narrative issued to the other side. This means that he will be isolated from the rest of the officers during the Staff Ride and will have rather a dull time, and the director will have to prepare two narratives every day instead of one. At the same time, the temptation to make the enemy do things to checkmate the action of the officer commanding the other side will be removed.

At the commencement of the Staff Ride the officers should be informed either that the enemy is represented by another officer who is entirely independent of the director as regards the action taken, or that the enemy's plans have been already decided upon and will not be altered. They should also be told that these plans have already been typed and will be issued to the officers at the termination of the Staff Ride. This will create a feeling of confidence in the officers, who will know that they have a fair course in front of them and will only be required to overcome the difficulties which must arise in every operation of war.

The method of preparing the scheme and conducting the exercise can be illustrated from the general and special ideas given in Chapter V., making the two opposing detachments somewhat smaller. The general idea can remain the same. Paragraph 3 of the special idea, Red, can be altered to read "the 24th infantry brigade, 30th field artillery brigade, and 7th Hussars, under the

General officer commanding 24th brigade," and in the second sentence "this brigade has been holding" can be altered to "this regiment has been watching." In paragraph 5 the detachment at Ballylanders Pass can be omitted.

Paragraph 4 of the special idea, Blue, can be altered to read "the 52nd and 53rd infantry brigades, the 59th field artillery brigade, 101st howitzer brigade, and 51st field company of engineers, all of the 18th division with the 3rd and 4th Lancers, the whole under the general officer commanding the 18th division."

The last part of paragraph 6 can be altered to read "the 53rd brigade was mostly in reserve."

We will suppose that the officers are to be on the Red side and that the operations of the enemy are to be conducted by the director. The orders to the officer commanding the Blue detachment are quite clear, so it is not difficult for the director to produce a series of situations and decide beforehand on the action of the enemy, Blue. The officers on the Red side could assemble at Caher at 5 P.M. on the 15th; they could be employed during the 16th in reconnoitring a defensive position near Caher for occupation by the Red detachment, arranging outposts, bivouacs, reconnoitring the line of retreat on Mitchelstown, &c.

The narrative issued on the evening of the 16th to the officers on the Red side would disclose the fact that the 7th Hussars had lost ground during the day and that an attack by Blue might be expected on the 17th; *vide* Chapter XII., Preparation of Narratives.

On the Blue side the director can decide beforehand how the Blue commander will deliver his attack. For example, it may be laid down that a frontal attack is to be made along a certain extent of front, and that the main attack is to be delivered against the right flank of the Red position, wherever it may be. This of course is a purely

arbitrary decision, but it is quite enough for the purposes of the Staff Ride, and will prevent the director from making the Blue attack come against what subsequent reconnaissance will show is the weakest part of the line or the part which the Red commander has not defended properly.

On 17th the Red officers can be taken on to the position selected for the Red detachment, and a series of situations of the following nature can be issued for them to work out:

Tactical Exercise on the Ground.

First Situation.

1. The position is occupied as directed in the orders of the officer commanding the Red detachment.

Note.—A copy of these orders would have been issued to all officers on the previous evening.

2. At 4 A.M. on 17th an attack developed from the north against the front of the position, and at 5 A.M. a strong force, with its outer flank protected by cavalry, attacked the eastern flank of the position.

3. The position of the enemy's troops, so far as they would be known to Red, and the exact distribution of the Red troops, will be given to the officers on the ground. One Red battalion is still in reserve in rear of the eastern flank of the position.

4. The 7th Hussars have been pressed back by hostile cavalry to the line —— ——, and will shortly be compelled to retire still farther.

5. It is evident that the Red detachment is being attacked by greatly superior numbers, and the General commanding has decided to commence a retreat to the Suir at Caher.

6. As General officer commanding the Red detachment

state your general plan of operations and write the orders (verbal or otherwise) that you would issue.

The second situation would deal with the first rear-guard position which was taken up by Red, whilst the remainder of the force retired across the Suir.

In the third situation the details of the retirement of the whole force, including the rear-guard, across the Suir, the occupation of a position on the far bank to cover the retirement of the rear-guard, and eventually to dispute the passage of the river by the enemy, would be worked out.

The method of conducting these exercises is described in Chapter XVIII.

The director, when deciding upon the movements of the enemy, would consider the probable course of action their commander would adopt in real war. He should not credit the enemy with knowing too much about the Red detachment, and consequently should not allow the enemy to pursue too closely.

The most difficult operation in the above exercise would be to draw off from the main position held by Red, especially if the enemy, after capturing the position, could command the lines of retreat with their guns. The action of the Red cavalry and the direction of their retreat to the Suir would afford an instructive subject for discussion.

On the evening of 17th the narrative would give a brief account of the day's operations, and might conclude with some information about the enemy to indicate whether the Blue troops had halted on the Suir, whether they had forced the passage and evidently meant to continue their offensive action, or whether it was probable that some or all of them had retired, just as Jackson did after the battle of McDowell, which somewhat resembles the above situation.

For example, we will suppose that Red did not destroy the bridges over the Suir when they retired, but that about

4 P.M. it was discovered that the bridges had been blown up by Blue. This information should be sufficient to show the Red commander that no further offensive action on the part of Blue need be anticipated. Taking into consideration the situation in front of the main Red army, which would be given by the director in the narrative, the Red commander on the evening of 17th would have to decide whether to stay where he was, retire, or advance and attack whatever was in front of him.

The director can arbitrarily decide what the enemy intends to do on 18th. For example, two Blue battalions, a battery, and a squadron can be left on the Suir to contain the Red force, and the remainder can march away to rejoin the main Blue army. If this is done the officers on the Red side during the 18th can be employed in reconnoitring the enemy's position for an attack, making arrangements for crossing the river, driving back the enemy's outposts, &c.

On the 19th the details of the attack can be worked out on the ground in the form of a tactical exercise and in the manner suggested in Chapter XVIII.

To summarise the above, we see that the director can decide, before the Staff Ride commences, the action of the enemy. On June 16 the Blue detachment, greatly superior in numbers to Red, assembles somewhere north of Caher and prepares to attack the Red detachment.

On June 17 Blue makes a frontal attack with part of his force and makes his main attack against the eastern flank of the Red position. The attack succeeds, and Blue presses back Red to the Suir. In the evening the Blue detached commander is ordered by the Blue Commander-in-Chief to leave two battalions, one battery, and one squadron to contain Red on the Suir, and to rejoin the main army with the rest of his detachment.

On June 18 the small Blue detachment occupies some

position which can be selected from the map, and which should not subsequently be changed to make it more difficult for Red. This position is reconnoitred by Red on 18th and attacked on 19th, which we may presume is the last day of the Staff Ride.

This plan, so far as the enemy is concerned, can be carried out, whatever the Red commander may decide to do. For example, suppose the Red General decides to retire behind the Suir at once and not fight in the position indicated by the first situation. The result will be that during 16th the Blue detachment will gain the neighbourhood of Caher and can still attack the Red detachment on 17th. If the Red commander, in spite of the narrative issued on 17th, again retires on 18th, it will be advisable for the director to send him a despatch from the Red Commander-in-Chief directing him to advance and attack on 19th. In any case the original design selected by the director for the Blue commander to adopt should not be changed more than is absolutely necessary during the progress of the Staff Ride, and at the end of the Staff Ride this original design should be issued to the officers on the Red side, to show them that they have been treated perhaps more favourably than they would have been in real war.

The example given above is of a very simple nature, which offers little strategical scope for the commander of the Red detachment or for the imaginary Blue commander. These small Staff Rides are, however, unsuited to the solution of great strategical problems, and it is sufficient to create the strategical situation and let the officers work it out so far as their own force only is concerned. In this manner the real instruction of the exercise, the study of ground, will be given the greatest prominence, and at the same time sufficient strategy will be introduced to make the situation real and increase the interest of the work.

CHAPTER X

STAFF RIDES FOR PRACTISING OPERATIONS AGAINST SEMI-CIVILISED OR SAVAGE RACES

To practise operations against a semi-civilised or savage race, it is out of the question to attempt to represent the enemy by a party of officers. They would learn no useful lessons, the conduct of the exercise would be very difficult, and impossible situations would frequently arise.

Officers during a Staff Ride are very apt to do things which they would never do in war, even when they are dependent for food on a long column of transport or on a line of communications. If this drag on their actions is removed, and they are directed to conduct guerilla warfare, their imagination, which appears sometimes to be dormant on occasions where it is really required, will be given full scope, and the situations produced will be far more difficult than those which must be dealt with even in the real campaign.

The Staff Ride, therefore, should consist of a director and a party of officers who represent the regular force, the action of the enemy being decided upon and described in the narratives and situations which are issued by the director during the progress of the exercise.

In any form of guerilla warfare it is frequently impossible to do any reconnaissance of ground until the proposed operation is actually in progress. Reconnoitring officers can rarely leave the column, march on ahead with a small escort, and study the ground with a view to an attack on

the tribesmen, or for any other purpose. During an advance up a valley on the north-west frontier of India, or during a march through such jungles as are to be found in Burmah and elsewhere, it is quite possible to reconnoitre the country and decide upon its tactical capabilities for a subsequent retreat, but such reconnaissance will be of no use for the operations immediately taking place. Staff Rides of this nature should, in consequence, take the form of a series of tactical exercises on the ground rather than the stereotyped reconnaissances of regular warfare. The orders issued in the evening for the next day's operations will include more administrative than tactical details, the necessary instructions regarding the latter being given verbally on the ground as the situations arise.

The scheme for the Staff Ride can be taken from any of the numerous small wars upon which we have been engaged, and should include a line of communications which require protection from the hostile tribesmen, together with some definite plan involving the co-operation of two or more columns which can but rarely gain communication with each other by visual signalling. The introduction of wireless telegraphy into the valleys of the tribesmen on the north-west frontier of India will no doubt greatly facilitate such communication, but there appears to be no practical experience of such methods at present.

The most important requirement is to obtain suitable ground. It is useless to attempt to hold such a Staff Ride in ordinary country: the demand on the imagination is too great to expect any useful instruction. To practise operations against the tribesmen on the north-west frontier of India we must go to the Snowdon range in Wales, or some similar ground, before we can even approach the required conditions.

There are a few fundamental principles of hill-fighting

which are dependent entirely on certain physical features of the ground, and to practise the application of these principles the ground must be of the required description.

The first of these principles is that each side tries to occupy a higher peak than the other.

The second is that the regular troops must be accompanied by supplies with the necessary transport, and this transport must move along the valleys; whereas the tribesmen depend on local resources for their sustenance, can assemble rapidly in one locality for warlike purposes, and can disperse with equal speed and immediately become peaceful inhabitants.

The third principle is that the tribes by picketing the regular columns can obtain the most exact and ample information of their enemy, whilst it is rarely possible for the regular troops to obtain any information regarding the movements or intentions of the tribesmen.

The fourth principle is that regular troops should never appear to be retreating unless it is absolutely unavoidable, such as a raid up a valley for the purpose of destroying villages, when there is no outlet at the head of the valley.

The fifth principle is that an immediate attack, especially if it can be delivered against the flank of any position, such as a pass which is occupied by tribesmen, is more likely to succeed even with small numbers than if a long halt is made to bring up reinforcements.

The sixth principle is that any threat against the tribesmen's line of retreat will at once weaken their hold on the strongest of positions.

The seventh principle is that the flanks of a moving column of troops or transport cannot be protected by detachments moving along the flanks, because it is out of the question to do so, and therefore the protection must be afforded by the occupation of definite localities, which must be held till the whole of the column has passed.

To apply any of these principles during a Staff Ride suitable ground is absolutely essential. In the following example it is assumed that we desire to practise mountain warfare, and that the Snowdon range has been selected as most nearly approaching the required type of country. The reason for the war is immaterial. Hostilities are usually caused by the tribesmen raiding peaceful villages beyond the limits of their country, and the object of the subsequent campaign is almost invariably of a punitive nature, with the intention of returning after the tribes have been brought to terms, and not retaining possession of their territory. It is as well to make this clear in the scheme, because the methods to be adopted in the first case would differ materially from those in the second. In the first case one or more advanced depôts would be formed as close to the tribal territory as possible, or in some cases actually inside the border, and a series of punitive expeditions, each self-contained as regards supplies, would operate from these centres. In the second case definite passes and other localities must be permanently held and fortified, and the country conquered bit by bit. Either of these methods could of course be practised during a Staff Ride, but the general system of conducting the exercise would be much the same in each case.

The general idea would explain the situation and describe the plan of operations.

The special idea would deal with the part to be played by the one column selected for the exercise.

General Idea.

See Sketch No. 21.

1. The territory of the various tribes is shown on the sketch, and the boundaries between each are indicated roughly by chain dotted lines.

2. The Menai Strait is supposed to be a deep gorge

with a mountain torrent, bridged at Port Dinorwic and Menai Bridge. The sea to the north-east is supposed to be mountainous country occupied by friendly tribes. The sea to the north-west is British territory, the frontier running north-east and south-west through Holyhead. The sea south-west of Penrhyn and immediately west of Carnarvon is supposed to be impassable mountainous country very sparsely inhabited.

3. The fighting population of the Afon Khels is about 7000, that of the Conway tribe about 6000, and that of the Anglesea tribe 4000. The Conway tribe are hereditary enemies of the Afon Khels, but are even more hostile to the British than the latter. The Anglesea tribe, though friendly, are unlikely to resist the temptation afforded by any opportunity for loot.

4. The Afon Khels have been raiding the villages of the Anglesea tribe, and also those in British territory. A punitive force has been sent against the Afon Khels, and, assisted by the Anglesea tribe, has driven them back across the Menai Strait. This force is now assembled at Menai Bridge and Port Dinorwic. The eastern column consists of one infantry brigade, one brigade of field artillery, one battery of mountain artillery, one battalion of pioneers, four companies of sappers and miners, and one squadron of cavalry. Holyhead is occupied by two battalions, a battery of field artillery, a squadron of cavalry, and a pioneer battalion.

5. The nearest railway station is twenty miles north-west of Holyhead, with a good and well-graded road between the two. The road from Holyhead to Menai Bridge and the branch to Port Dinorwic is very rough in places, but practicable for wheeled transport. All other roads in the theatre of war which are marked brown in the half-inch Ordnance map are supposed to be mountain tracks, suitable for pack transport only.

6. The British columns occupied Menai Bridge and Port Dinorwic on June 4, and it is proposed to establish supply depots at one or both of these places to facilitate the further operations against the Afon Khels.

7. The Afon Khels are holding the entrances to the three passes, marked A, B, and C on the sketch, and are constantly firing on the British outposts covering Menai Bridge and Port Dinorwic.

8. Unlimited reinforcements and an ample supply of transport can be obtained at twenty-four hours' notice at rail-head.

Officers are required to appreciate the situation on June 4, particular attention being paid to the following points:

(*a*) The strength, number, and composition of the various columns that are to invade the territory of the Afon Khels, and of any reserve which it is considered advisable to retain at Menai Bridge.

(*b*) The method of supplying these columns and the amount of transport required to accompany each.

(*c*) The method of dealing with possible hostilities on the part of the Conway tribe, and the security of the road through the territory of the Anglesea tribe.

(*d*) The security of the advanced depôts at Menai Bridge and Port Dinorwic, and how long it will take to collect sufficient stores and transport at these places to enable the columns to advance.

(*e*) Diagrams or graphics showing the system of supply and amount of transport required on the lines of communication should be attached to the appreciation.

The above scheme could be issued to the officers about three weeks before the Staff Ride commences. These

would be examined and criticised by the director, who would then prepare the special idea, based on the intentions of the officer who was to command during the Staff Ride.

The first paragraph of the general idea describes the extent of territory occupied by the various tribes. It will be seen at once that the size of each is ridiculously small compared with similar tracts of country on the north-west frontier of India. This drawback cannot be avoided when the Staff Ride is held in such a small mountainous district as North Wales. The main object should be to make the fullest possible use of the most suitable ground, and compel an advance over that ground by imposing conditions regarding hostile tribes and impassable country such as those indicated in the second paragraph. Otherwise the officers would naturally avoid the difficult advance through the Snowdon passes, and endeavour to go round over more favourable ground.

The third paragraph gives a rough estimate of the adult male population of the various tribes. The numbers given would depend upon the class of Staff Ride which it was proposed to carry out, limited by the number that would be likely to occupy such a small area in real war. Two disturbing elements are introduced into this paragraph in order to increase the interest and realism of the scheme. These are the probable attitude of the Conway tribe and the safety of the road through Anglesea.

The fourth paragraph gives a sufficient reason for the campaign, and shows that when the Afon Khels have been brought to terms the British force will probably withdraw, so that no permanent occupation of the country is intended. The operations in the Anglesea country would not require so many men or so much organisation as the further advance into the territory of the Afon Khels, and for the purposes of the scheme it is assumed that the Anglesea

country having been cleared, a pause is necessary before a further advance can be made. It may be said with justice that the force originally organised should have been strong enough, and equipped with sufficient transport, to carry out the whole operation without a check.

The small extent of the mountainous country compels us, however, to create a situation where the troops are actually in front of the passes through which we wish to operate. Furthermore, it is desirable to give the officers a scheme which involves a study of how many troops are actually required.

These numbers will be reduced to a minimum owing to the difficulty of supply, and if any officers recommend an unduly large force they will defeat their own ends. If the scheme is altered, and a situation is created before the Anglesea country has been cleared, the Staff Ride should take place through that country, which we know is unsuitable for our purpose. If, on the other hand, the situation remains as depicted above and we produce the whole force on the Menai Strait, we must give the strength of this force, and the officers will lose a valuable part of the instruction. Furthermore, it is much easier for the director to criticise the composition of the force employed by the officers, and their calculations regarding supplies, transport, &c., than to work out these details himself, and become subject to their criticisms.

Finally, occasions have occurred, in small wars of this nature, where preliminary operations have taken place in order to secure a suitable advanced depôt. This depôt being held by a small force, which will not consume the supplies as rapidly as they can be collected, the numbers actually given in the fourth paragraph can be altered to suit the requirements of the case, and might perhaps be decreased with advantage.

The fifth paragraph gives details about rail-head and

the various roads in the theatre of war. The good metalled roads which actually run through the three Snowdon passes must be considered to be similar to the mountain tracks to the north-west of India. The remainder of the country must be taken as it actually exists. The distance to rail-head can be increased if considered desirable.

The sixth and seventh paragraphs supply information as regards the date, and give the position of the Afon tribesmen. The date selected should be sufficiently anterior to that decided upon for the commencement of the Staff Ride to allow the necessary time to elapse for the collection of supplies at the advanced depôts.

The eighth paragraph gives the source whence reinforcements, transport, and supplies can be obtained. The notes given under headings (*a*), (*b*), &c. should be unnecessary, except for untrained staff officers. They are included above in order to show the general scope of the work.

Before preparing the special idea it is desirable to explain the general management of the exercise, especially so far as it differs from an ordinary Staff Ride.

The work on the ground consists of a series of tactical or administrative exercises, and can include the attack or defence of the mouth of a pass, an advance or retreat through a valley or across a succession of mountain ridges, the selection and security of camps or bivouacs, and the protection of convoys of supplies. There is ample scope for the production of interesting situations dealing with any of these problems, but it will be found advisable to decide beforehand what class of operation it is intended to practise and then frame the special idea, and the situations, to suit each day's work.

A previous reconnaissance of the Snowdon range by the director will disclose the fact that passes A and B most nearly approach the conditions of warfare beyond our

north-west frontier, and of these two B is perhaps the best for an advance or retirement, because the rocky peaks are more precipitous, and it is more difficult to move troops along the summits of the ridges on each side of the road. For an attack on the mouth of a pass perhaps A is the best, in spite of the slate quarries and houses south of Bethesda.

The officers might assemble at Bangor on the evening of 26th, and the following programme could be carried out:

26th June. Work during the evening. Operation orders for the advance of the Menai Bridge column to capture the entrance to pass A. Arrangements for supplying the force, whether the supplies for the whole operations are to accompany the column or whether a line of communication with Menai Bridge is to be kept open. A conference could be held after dinner, when the director might bring to notice the various tactical and administrative problems which have to be solved in all operations of this nature, and explain to the officers the principles of warfare against mountain tribesmen.

27th June. The officers would assemble in the morning at some convenient place on the road selected for the advance of the column, where opposition might be expected and where the entrance to the pass could be seen. The orders written the previous night by the officer commanding the column can be discussed, and it should be made quite clear how many troops there are in the advanced guard, the distance, if any, between the advanced guard and the main body, and the exact position at the moment of the head of the transport and of the rear-guard. The situation having been thoroughly explained to the officers and all questions they may ask having been replied to, they should be directed to decide upon the best way of attacking the pass. This attack can be carried out on the ground, by issuing a series of situations in the manner explained in Chapter XVIII.—E. The Attack.

When this work is completed the officers, working as one party, can decide upon the locality for the camp and select suitable points to be held by picquets during the night. One officer should climb to each place selected for a picquet to make sure that it is suitable for the purpose and will be tenable at daybreak on the following day. Thus five or six officers would go off to visit the various places selected for picquets, and the remainder would work out the details of the bivouac.

During the day each officer would write down his solution of each problem that was presented to him, and these papers would be collected by the director at the close of the operations. In the evening the officers would write operation orders for the next day's advance up the pass. These orders would deal chiefly with the order of march, strength of the advanced guard, and other details of that nature. The director would examine the work done by the officers during the day, and hold a conference dealing with that work about 9.30 P.M., when he would also recapitulate the important principles of mountain warfare that had been discussed on the ground.

On June 28 the officers would assemble on the ground captured the previous day, and a series of situations would be issued dealing with the advance up the valley towards A and the final capture of the head of the pass. Types of these situations are given below, and explain themselves. When preparing the situations the events which usually occur during an operation of this nature should be borne in mind. Thus the tribesmen frequently allow the greater part of the fighting portion of a force to pass up the valley, in the hope that a favourable opportunity may occur for attacking and looting the transport and killing the drivers. The situations should therefore deal with danger on the flanks and rear rather than in front, except at the head of the pass, where the tribesmen would vigorously

oppose a further advance both in front and on the flanks.

It will be found that during the early stages of the advance the officers are apt to detach too many companies to guard the flank and rear of the column, and consequently, during the later stages, sufficient troops are not available to deal with the more serious opposition. It should be pointed out that if half a company is detached to hold a peak on the flank, it is extremely unlikely that those men will be able to regain the head of the column during that day's march. It is most difficult to pass men along a line of transport when the only road is the bed of a mountain stream. It is advisable therefore at the commencement of an advance to place nearly all the fighting troops in front. Companies, half-companies, or sections are detached from time to time to hold peaks or ground on the flanks, and these join the rear-guard when the whole of the transport has passed. In this manner the leading troops are constantly being reduced in numbers and the rear-guard increased. The method of allotting work to the various battalions at the head of the column forms an instructive subject for discussion. Broadly speaking, there are two methods. One is to give one flank to one battalion till all its companies are used up, another battalion taking the other flank. The other system is to give both flanks to one battalion till the whole is absorbed. There are arguments in favour of both systems, but it is probable that the latter is the best, because all the companies eventually collect in one locality, the battalion commander has not such a length of road to guard, and consequently can use his reserve companies more rapidly and with more effect. The withdrawal of the last companies of the rear-guard is always a difficult matter, and the evacuation of a point on one flank must frequently be timed to harmonise with that on another flank. If one

man is commanding the companies on both flanks the operation can be conducted with more precision, and with less chance of a company or section being cut off. Numerous other tactical problems of a similar nature will constantly crop up during the exercise.

The final attack on the head of the pass will require the closest co-operation of artillery and infantry. It frequently occurs that artillery by moving up the slopes of one side of a valley can find a good position to fire across to the other side, when no position exists in the valley itself. Fire directed in this manner is somewhat oblique to the enemy, and the target is not obscured by ridges running out into the valley.

The work done during the day would be examined by the director in the evening, and a conference held as suggested for June 27. The narrative issued every evening at 5 P.M. would give the situation for the next day's operations, and officers would be called upon to write the necessary orders and prepare any other staff work which was required.

On June 29 the scene of operations might be changed to pass B, and a fresh situation created involving a retreat of the Port Dinorwic column from the head of the pass towards Port Dinorwic, with the tribes holding the peaks on either flank. This exercise would be carried out by means of a series of situations in the same manner as described in Chapter XVIII.—D. The Action of a Rear-Guard. The object of this change would be to bring the officers on to fresh ground and practise the most difficult operation of hill warfare, namely, a retreat. The conference in the evening would deal with the operations which had been studied during the day, and the officers would be directed to prepare operation orders for the next day's work.

On June 30 the scheme might again be changed slightly to practise an attack by the Menai Bridge column from

the A valley over the ridge to the B valley to assist the Port Dinorwic column. Whatever scheme of work is decided upon, no useful purpose can be served by carrying the operations farther south than the places marked A, B, and C on the sketch, because the hills, though still high, lose their precipitous nature, and troops can move over them in almost every direction. The scheme must be sacrificed to the ground which is available, and when this is limited many difficulties, such as those already mentioned, will crop up, and not only tax the ingenuity of the officer who is preparing the scheme, but demand the exercise of a good deal of imagination on the part of the officers under instruction. The great object should be to make the fullest possible use of the ground which is most suitable, even if the continuity of the scheme is interfered with, and to avoid any imaginary change in the physical features of the country where the tactical and administrative part of the scheme is to be worked out on the ground.

In the above scheme the narratives issued each evening might disclose the following course of events, on the supposition that it has been decided to employ four columns :

June 27.

No. 1 column starts from Menai Bridge and captures the entrance to valley A.

No. 2 column remains in reserve at Menai Bridge.

No. 3 column from Port Dinorwic advances and carries the entrance to valley B.

No. 4 column remains in reserve at Port Dinorwic.

The operations of No. 1 column only to be worked out on the ground.

June 28.

No. 1 column advances towards A, but fails to capture the pass at A, and bivouacs north of it.

No. 2 column remains as before.

No. 3 column advances, but fails to capture the pass at B, and bivouacs north-west of it.

No. 4 column remains as before.

The operations of No. 1 column to be worked out on the ground.

June 29.

The hills east, west, and south of No. 3 column are occupied by a powerful force of tribesmen, and the column is compelled to retire. No. 1 column carries the pass at A, late in the afternoon, but the hills just south of A are still held by the tribesmen.

No. 2 column is ordered up from Menai Bridge during the day, and bivouacs at night north of A.

No. 4 column remains at Port Dinorwic.

The operations of No. 3 column to be worked out on the ground.

June 30.

No. 1 column continues to hold the pass at A and attacks the hills to the south of it.

No. 2 column is directed to cross the range west of A and assist in the advance of No. 3 column.

No. 3 column again advances to attack the head of the pass at B.

The operations of No. 2 column to be worked out on the ground.

Assuming that it has been decided to carry out the operations described above, the special ideas, the various situations, and the narratives can now be prepared. Sketch No. 21 is on too small a scale to give the necessary details of ground and names of places, so in the following examples these, together with the number and composition of the columns, are omitted. The only object of giving these examples is to suggest the various points which require attention in order to make the exercise a success.

SPECIAL IDEA.

1. The field force for the campaign against the Afon Khels is divided into four columns. Nos. 1 and 2 columns are assembled at Menai Bridge, and Nos. 3 and 4 columns at Port Dinorwic. The strength and composition of each column is as follows, &c. &c.

2. The advanced depôts established at Menai Bridge and Port Dinorwic contain — days' supplies for the whole force. Each column carries with it — days' supplies on mules, and an ammunition column containing a reserve of — rounds S.A.A. per man and — rounds of shell per gun.

3. Nos. 1 and 3 columns are ordered to advance on 27th from Menai Bridge and Port Dinorwic and capture the entrance to A and B passes respectively, which are known to be held by the Afon Khels.

4. Reports have been received that the Conway tribesmen are collecting on their western border, but there is no information available as to whether they have joined hands with the Afon Khels.

5. The present outpost line covering Menai Bridge extends from —— by —— and —— to ——.

Officers are required to write the orders and make all necessary arrangements for the advance of No. 1 column from Menai Bridge on June 27.

A conference on the general subject of hill warfare will be held at 9.30 P.M. to-night.

Having received the orders written by the officer commanding No. 1 column, the director will see that every other officer is given a copy. He will then decide the best place for the officers to assemble about 10 A.M. on 28th, and will prepare the various situations, which would be of the following nature:

First Situation.

1. In accordance with the orders issued by the officer commanding No. 1 column, the force is now disposed as follows:

The head of the advanced guard is at ——, the head of the transport at ——, the rear of the transport at —— (or the transport has not yet left camp).

2. Hitherto the tribesmen have not appeared in force, but on attempting to advance from —— the leading troops of the column were heavily fired upon from ——, ——, and ——.

3. The localities occupied by the tribesmen and the comparative intensity of fire from each will be indicated by the director on the ground.

4. As officer commanding No. 1 column, state how you would attack the entrance to the defile in front.

Officers would require about an hour to reconnoitre the ground, decide upon their plan of action, and write down their intentions. During this reconnaissance the officers should not be allowed to wander from the main column, approach too closely to the ground occupied by the tribesmen, or do anything they would be unlikely to be able to do in real war. The officers would reassemble at the hour appointed by the director, and the latter would discuss the various plans put forward, and state what he considered to be the best solution. The attack could then be carried out on the ground in the manner suggested in Chapter XVIII.—E. The Attack. At the conclusion of this exercise the second situation could be issued, and might read as follows:

Second Situation.

1. The exact distribution of the British troops, after

the successful assault on the position held by the tribesmen, will be given to the officers on the ground.

2. The head of the transport has reached —— ; the rear-guard has just cleared ——.

3. The tribesmen have disappeared into the valley, and none of them are to be seen, though an occasional shot is heard.

4. The British casualties during the attack have amounted to 43 men.

5. It is now 4 P.M., and the officer commanding the column has decided to bivouac for the night. State what arrangements you would make for the comfort and security of the troops and transport.

This situation would be worked out in the manner suggested on page 206. The officers would then assemble at the place selected for the bivouac, and the various arrangements would be discussed. This would terminate the work on the ground. A narrative should be issued at 5 P.M. showing the progress of events with the third column, and giving any information considered desirable regarding the Afon Khels or the Conway tribe. This might take the following form:

NARRATIVE OF OPERATIONS UP TO 5 P.M., JUNE 28.

1. The operations of No. 1 column have been described on the ground.

2. No. 3 column advanced from Port Dinorwic early on the 27th and attacked the entrance to valley B. The tribesmen were driven back after a severe struggle, in which the British casualities amounted to 79 men. The column bivouacked near —— (the most convenient locality near the captured position), with the adjacent hills occupied by picquets.

3. The first and second columns are ordered to advance to-morrow and endeavour to secure the head of the passes at A and B respectively. The third and fourth columns will remain at Menai Bridge and Port Dinorwic.

4. Information has been received that the Afon Khels are holding the passes at A, B, and C, but no idea can be obtained of their comparative strength at each.

5. The Conway tribe are reported to be joining the Afon Khels.

During the evening the officers would write orders for the advance up the valley next day, and work out any details regarding supply, care of wounded, &c., which the peculiar circumstances of each case would demand. The director would hold a conference in the evening and discuss the most important points brought to light during the work on the ground.

On June 28 the officers would assemble about 10 A.M. at the bivouac occupied the previous evening. All officers would have been given the exact distribution of the outposts and a copy of the orders issued by the officer commanding the column for the advance up the valley. These details would form the basis for the exercise which during the earlier stages can be conducted in the manner suggested below without issuing any situations.

The officers will accompany the director into the defile, and a halt will be made directly the outposts have been passed and it becomes apparent that some troops must be sent to occupy a peak on either flank. It will be best to divide the officers into parties of two or three, officers of different arms working together. This will abbreviate the discussions and simplify the subsequent examination of the work.

At the first halt the director will ask each party to enter in their note-books what ground on the flanks it is neces-

sary to hold, where the troops are to come from, and what they are to do when the whole of the transport has passed. This ought not to take more than ten minutes or so. The director can then discuss the decisions of the various parties and state what he considers would be the correct solution of the problem. The officers would then be taken farther up the valley until it was again necessary to detach troops to the flanks. In this manner the exercise would proceed until the whole of the column with its transport had entered the defile.

At each halt the director should state whether any ground in the neighbourhood is occupied by the tribesmen, and the intensity of fire from any particular point.

Once or twice during this part of the exercise the director should send the officers actually on to the peaks they propose to picquet. It is most important that this should be done, because frequently on arrival at some suggested locality it is found necessary to occupy some other point beyond in order to secure the safety of the column. The actual physical exertion of climbing on to these peaks brings home to the officers the difficulties of the advance, and also greatly improves their eye for such country. If officers simply stroll along a valley and say they will put a picquet on that peak, another somewhere else, and so on, the instruction is not brought home to them, and a great part of the value of the exercise is lost. It is also desirable that the director himself should visit one or two of these peaks, so as to be able to speak with greater authority on the subject.

The best system is to halt when some ground of unusual interest is reached and tell off officers in parties of two to climb the various peaks. They should be directed to consider, as they go along, how they would lead their men to attack these localities in case they are held by the enemy, and whether the whole force placed at their disposal should

climb to the summit, or whether part only should go, the remainder following some distance in the rear and halting half-way up the mountain, or returning to the main body when the peak has been occupied.

When this part of the exercise is concluded the director can produce the first situation, which might take the following form:

First Situation.

1. The exact position of all the troops in the column and of the transport will be given to the officers on the ground. (This would be taken from the decisions arrived at during the advance by the officer commanding the column. Although other officers may have distributed their troops in a different manner, all must work on the above for this situation.)

2. The tribesmen have suddenly appeared in strength in front and on the east flank of the column, and several parties are seen on the hills on the west flank. The troops guarding the flanks of the column are almost everywhere engaged. The exact position held by the tribesmen across the valley in front will be indicated to the officers on the ground. (This position would probably be at the head of the pass near A.)

3. It is now 3 P.M. State what you propose to do.

The chief matter to decide is whether the advance is to be continued, or whether it will not be advisable to select a bivouac for the night. A calculation of time and space will reveal the hour when the transport may be expected to close up to the bivouac, which, if possible, should be effected in daylight. On this will depend to some extent the decision as to whether the tribesmen in front are to be attacked with a view to driving them from their position, or whether they are to be attacked merely with the object of gaining possession of some important ground

which would command the most convenient bivouac. It is very important that the bivouac should be selected early in the afternoon, because every commander engaged in hill fighting is always anxious to get his column into bivouac, the necessary picquets posted, and sangars built before dark.

The officers will have studied a bivouac with its outposts on the previous day, and as they will have done a good deal of climbing, the details of the bivouac and of the outposts can be decided upon by studying the ground from the bivouac itself. The selection of the bivouac, apart from questions of water and suitable ground, is influenced by the question as to whether it can be defiladed from any position which can be occupied by the tribesmen. By hugging one side of a valley it is frequently easy to defilade the bivouac from the heights on that side, but it is then in full view from the heights on the other side of the valley. It is desirable in such cases to place the bivouac on that side which it is most difficult to picquet. In some valleys there is very little lateral space for a bivouac, which means that the troops and the transport are stretched out in a long line, which greatly increases the difficulty of defending it. These and many other such points will form ample subjects for discussion during the various stages of the work.

The officers should be given about an hour to work out the details of the bivouac and the outposts; a conference will then be held in the usual manner, and the exercise will terminate.

As it is proposed to deal with the third column on 29th, a narrative must be issued at 5 P.M. on the evening of 28th, which will give the situation when the third column is about to retire down the valley B. This would not be till the morning of 29th, so an exception must be made to the ordinary rule, and the narrative dated, say, 10 A.M. on 29th, when the exercise on the ground will commence.

NARRATIVE OF OPERATIONS UP TO 10 A.M. ON 29TH.

1. During June 28 No. 3 column advanced up the valley B, and at about 11 A.M. were heavily attacked on both flanks by the tribesmen. The attack was repulsed, and about 3 P.M. the leading troops of the column approached within a mile of B. The head of the pass was found to be strongly held by the tribesmen.

2. The officer commanding No. 3 column bivouacked about two miles north of B, intending to attack the head of the pass early on 29th.

3. On 29th the tribesmen appeared in great strength on the surrounding hills, and the line of retreat of No. 3 column was cut off. An attack on the head of the pass at B had failed, and the officer commanding No. 3 column decided to retire to the entrance of the valley and ask for the assistance of No. 4 column.

4. The troops attacking the head of the pass withdrew to the bivouac at 10 A.M., the outposts still remaining in the position they occupied during the night. The exact positions of the bivouac and of the outposts are shown on the attached Ordnance map.

5. Heavy firing is heard during the morning in the direction of A, but it is not known whether No. 1 column has succeeded in capturing the head of the pass or not. The hills south and south-west of A are still held by the tribesmen.

This is a somewhat feeble situation to produce, but it is very important that the officers should have an opportunity of practising a retreat, and the reasons for the operation are quite immaterial. The director should supply the information and the sketch referred to in paragraph 4, otherwise the officers will have no data on which to base their orders for the retreat. It will be necessary

for the director to visit valley B to obtain this information, as it can hardly be decided from the map alone.

During the evening of 28th the officers will write the orders for the retreat of No. 3 column, and the director will hold a conference on the work done during the day. The above-mentioned orders will deal chiefly with the order of march and the composition of the advanced and rear-guards. They are required as a working basis for the exercise on 29th. The officers would assemble at the bivouac of No. 3 column about 10 A.M. on 29th, and the director would discuss the orders issued for the retreat.

The first operation would be to gain ground to the north so as to commence the retirement of the transport. This part of the exercise need not be worked out on the ground, as the tactical procedure is the same as the operation practised on 28th during the advance up valley A. The director therefore can create a situation of the following nature, and work out the retreat of the rear-guard only :

First Situation.

1. The advanced guard, closely followed by the head of the transport, has reached ——. The rear of the transport has just left the bivouac.

2. As officer commanding the rear battalion of the column, state how you propose to carry out the orders of the officer commanding No. 3 column and commence your retirement.

The officers should be allowed about twenty minutes to write down what they propose to do, and the director would then discuss the situation in the usual manner.

The whole retirement down the valley would be worked out much in the same way as suggested for the advance. As soon as the rear of the column has passed the picquets

that covered the bivouac during the night, the director must arbitrarily decide the number of companies and the unit they belong to which are holding the various tactical points on the flanks of the transport during its retreat.

The method of withdrawing the various picquets and covering their retreat from positions held in rear is somewhat complicated, but is most instructive. The method of conveying orders; the question whether the picquet on the west or the east should retire first, the point it should retire on; how the various units are to be assembled on reaching the valley so that everything is in order, with no confusion; and many other points of a similar nature will afford ample scope for discussion and decision.

When a situation of particular interest arises, the officers should be sent in parties of two to climb to the various peaks held by the picquets, and directed to study the line of retreat of each picquet, and how far other picquets can assist. They should then assemble in the valley and discuss their experiences with the director. As already explained, it is very important that this should be done, because officers get a very slight idea of the difficulties which arise if they merely walk down the valley.

The action of the artillery during the retreat will also be considered, and the exact position occupied by the guns in each case should be decided upon and visited. It will be found that guns placed slightly up the eastern side of the valley will, as a rule, be in the best position to assist the retirement of the companies on the west side, and *vice versâ*.

The moment when the guns should retire, when other positions have already been taken up in rear, will also require careful consideration. In fact, the infantry and artillery retreat, each working in the closest co-operation with the other, requires some forethought and practice before the best results can be produced. If when this

exercise is completed there is time for further work, the officers can be directed to select a position holding the entrance to the valley, so as to facilitate the advance when reinforcements have been brought up from Port Dinorwic.

The work on the evening of the 29th and during June 30 can be carried out in a similar manner to the above. If it is desired, the scheme suggested on page 210 for June 30 can be changed, and the attack on the head of the pass at A by No. 1 column, or on the head of the pass at B by No. 3 column, reinforced from Dinorwic, can be carried out instead. This would be described in the narrative issued at 5 P.M on June 29.

Attempts have been made to carry out some of the above work by the ordinary system of reconnaissance, but it is not satisfactory. The director has to write out lengthy "situations" for each officer, each tactical operation is soon completed, and there is nothing further for the officer to do. The work is quite different to that on an ordinary Staff Ride, where a reconnaissance for attack, defence, outposts, &c., will completely fill up one officer's time for the day. The system advocated above has been found by experience to be far better from the point of view of instruction, and far easier to conduct.

There is not very much work to do in the evening, but that is an advantage, as the officers will be tired after climbing three or four thousand feet during the day. Officers should be warned to wear old clothes and suitable boots, and it is advisable for two officers to go together, as some of the peaks are very difficult to reach.

In some places the only possible way to keep down the fire from the top of a precipice is to climb up the slopes on the opposite side of the valley. The tribesmen who wish to fire on the column may conceal themselves from the column itself, but will be exposed to view from the upper slopes of the opposite hill.

If we wish to practise operations against tribesmen in country covered with bush or jungle, or on a sandy desert, it is essential that the exercise should be conducted over the required type of ground. The ordinary class of Staff Ride is unsuitable for the purpose, but a series of tactical exercises on the ground in the manner described above for hill fighting should prove highly instructive. In such cases there is very little variation in the type of country, so that the chief object of the exercises would be to study the tactics of the enemy, ascertain how he can be dealt with, and how the nature of the country, which will usually favour his tactics, can be turned to our own advantage or the difficulties reduced.

The scheme would be unimportant, but the methods of supply, formations on the line of march, methods of attack, defence, security, &c., would form material for instructive work. The exercises would be conducted in the same manner as suggested for practising hill fighting, so there is no occasion to enter into further details. There would be some difficulties as regards expense, and also as to the transport of food and tents for the officers taking part in the exercise. These no doubt could be overcome locally.

Our troops have suffered heavy losses in the past, and sometimes have failed, through neglecting to study the country and the inhabitants around them. It appears to be desirable, therefore, that officers quartered in such countries should not confine themselves to exercises in warfare against civilised nations, but should endeavour to extend their military knowledge by studying the peculiar conditions of ground and the tactics of a possible enemy whom they may find close at hand.

CHAPTER XI

EXAMPLES OF STRATEGICAL, TACTICAL, AND ADMINISTRATIVE PROBLEMS SUITABLE FOR STAFF RIDES, AND A CONSIDERATION OF THE INSTRUCTIONS WHICH SHOULD BE GIVEN TO RECONNOITRING OFFICERS

A LIST of strategical, tactical, and administrative problems suitable for working out on the ground is inserted, together with a similar list of problems which can be dealt with indoors.

Assistant directors and commanders are at a loss sometimes to find suitable work for the officers on a Staff Ride, and a reference to this list may be of service to them. All the problems suggested have actually been dealt with on previous Staff Rides, so the list contains no novelties. Notes on the method of solving some of these problems will be found in Chapters XIV. to XVI.

OUTDOOR WORK.

STRATEGICAL RECONNAISSANCES.

I. The general reconnaissance of a theatre of war or of an area of operations.

To ascertain the nature of the physical obstacles, such as mountains, rivers, canals, lakes, marshes, forests, enclosed country, &c.

The means of communication, such as waterways, railways, roads, &c.

The means of transmitting information, by telegraph, post, runners, boats, beacons, visual signalling, &c.

The resources as regard supplies of all kinds, such as food, forage, remounts, pack animals, manufactories, locomotives, railway waggons, motors, road vehicles and their traction, steam traction-engines, tents, blankets—in fact, everything that an army requires in the field, including in some cases, as on the north-west frontier of India, recruits, all the above points having reference to the defence of a frontier, the selection of a line of invasion, or the commencement of a new phase in a campaign. Examples: The defence of Belgium in 1815, of France in 1870, or of Manchuria in 1904. The invasion of these countries at the same periods. The reconnaissance of the Bohemian mountains for the passage of the Prussian army in 1866. The reconnaissance of Bavaria for the advance of the French army to the Danube in 1805.

II. Reconnaissance for a definite strategical object, such as the passage of an obstacle, a change of base, a disembarkation, retirement, &c.

Examples: The reconnaissance to change Wellington's base from Portugal to the northern ports of Spain in 1813. The reconnaissance of the northern portion of Spain in 1813 to turn the French right in the Vittoria campaign. The reconnaissance by the Russians in 1877 to select a point of concentration on the Danube for their army. The reconnaissance of the coasts of Korea and the Liaou Tung Peninsula in 1904 for the landing of the Japanese army.

All the above involve a certain amount of tactical and a great deal of administrative reconnaissance, the main strategical object being kept constantly in view.

III. The reconnaissance of a railway system, or of waterways, for any of the purposes mentioned in II., or for some other object.

Such as the reconnaissance of the French railways when the Germans were advancing on Paris in 1870, to discover which were the best lines to repair, &c. The reconnaissance of canals, such as the sweet water canal in Egypt in 1882, to discover its utility and its possibilities and requirements for defence. The reconnaissance of the waterways in Portugal in 1811, with the object of forming supply depôts to give Wellington's army freedom and rapidity of movement throughout that country.

STRATEGICAL AND TACTICAL RECONNAISSANCES.

IV. The reconnaissance of a district partly for strategical and partly for tactical reasons; such as the examination of alternative lines of operation with a view to the selection of whichever is best for fighting purposes either in an advance or a retreat.

Examples of the above can be found in our invasion of Afghanistan in 1878, and Napoleon's secondary line of retreat through Bohemia instead of along the Danube, just before the battle of Austerlitz in 1805. The reconnaissance of a line of operations which has already been decided upon, either for political reasons or because no other line is possible, in order to discover its advantages and disadvantages, the strategical and tactical difficulties which may arise, and how to overcome them or turn them to our own advantage. Examples of these can be found in the Boer invasion of Natal in 1899, which was political, and in the Russian invasion of Turkey in 1877, the Turks having command of the Black Sea, and only one line of operations being open to the Russians.

TACTICAL AND ADMINISTRATIVE RECONNAISSANCES.

V. The reconnaissance of an area purely for tactical or administrative purposes.

To discover the best line of attack, or of retreat, with

alternative lines for each. The best local position for a prolonged halt, for outposts, or for a position of readiness either to attack or defend; to defend or force the passage of an obstacle; to protect a flank; to select defensive posts on a line of communications, and to guard convoys moving along that line. To ascertain a suitable locality for an advanced post, remount depôts, supply and ordnance depôts, hospitals, select railway stations for definite objects; to discover local resources and how they can be utilised for the benefit of the troops; to select a suitable line for laying a telegraph, railway, tram, or road. To discover means of obtaining water, fuel, forage, or any other requirement for the troops when these are scarce.

VI. Detailed reconnaissance, either tactical or administrative, of a locality already roughly selected for the purpose in view.

The best method of attacking a hostile position, including a reconnaissance of the approaches. The defence of a position, including the possibility of counter-stroke; the facility for movement of ammunition columns, reserves, &c., in rear, and the nature of the lines of retreat. The reconnaissance of a fighting position already selected, with a view to "battle administration," such as the supply of food, ammunition, and water, the care and movement of the wounded and disposal of the killed, the method of keeping the roads in rear of the fighting position clear of incumbrances, the means of lateral communication for the movement of troops. The locality for regimental transport and for the supply columns, method and hours of filling up the former from the latter. In fact, careful arrangements so that all administrative requirements of the troops during battle and after battle are thought out beforehand, with special reference to the peculiar requirements of each case, and with the knowledge that a great

deal of this work must be done after dark, when it is very easy in close country for transport to take a wrong road or track, and still easier to take a wrong direction in open country.

The reconnaissance of a bivouac. The selection of a fighting position for troops in the bivouac. The establishment of outposts covering this fighting position and the bivouac. The establishment of outposts in close touch with the enemy for a force in battle formation, when temporarily halted, or about to retreat. The reconnaissance of ground for a night attack, a night march, or a retreat by night. The selection and defence of tactical localities on a wide front for a force in a position of readiness either to attack or defend. The defence of an entrenched camp and advanced dépôt, a post on the lines of communication, a base, a railway bridge or station, canal lock, mountain pass, ford, road, bridge, &c. The reconnaissance of roads for an advance, retreat, movement to a flank, or for the use of any particular kind of transport from a coolie to a steam traction-engine. The repair and destruction of roads. The reconnaissance of a river or canal for boat navigation either for the transport of troops or supplies, for building a bridge or making a ford. For forcing and defending the passage at any particular point, for destroying existing locks, dams, and bridges, or making inundations. The reconnaissance of a railway station for entraining troops, sick and wounded, supplies of all kinds, horses, camels, live stock, forage, ammunition, ordnance stores, traction engines, transport waggons, &c., or for detraining any of these. The improvement of existing stations, such as the extension of sidings, provision of water, lighting, precaution against fire, construction of sheds and platforms, and the building of a railway station where none exists. The establishment of camps, depôts, and hospitals, either at a railway station, at a post on the

lines of communication, at the advanced depôt, or at the base. Reconnaissance of a town or village, for attack or defence, for supplies for hospitals as a depôt, or for whatever military purpose it is required. The policing and control of the inhabitants, and the usual peace method of preserving order. The reconnaissance of woods, forests, or marshes, for the purpose of making roads through them, either for the use of fighting troops only, or also for transport. The reconnaissance of mountain tracks and passes for similar purposes.

INDOOR WORK

STRATEGICAL, TACTICAL, AND ADMINISTRATIVE PROBLEMS WHICH CAN BE DEALT WITH INDOORS, IN SOME CASES WITH AND IN OTHERS WITHOUT PREVIOUS RECONNAISSANCE.

VII. Any of the problems described above, after the necessary information has been obtained by visiting the ground.

VIII. The appreciation of strategical, tactical, and administrative situations. The first two are constantly practised during Staff Rides, but the last is not usually given sufficient attention.

Appreciations of a situation from the point of view of some subordinate commander or administrator, such as the officer commanding the cavalry or the artillery, the officer directing the supply, transport, medical, ordnance, telegraph, postal services, &c.

Appreciations of a situation, so far as it is known, from the point of view of the hostile commander.

The method of dealing with all these appreciations is dealt with in Chapter XIV.

IX. The preparation of instructions and orders of all kinds, except those which are issued to troops during the

progress of an engagement, which last are dealt with in Chapter XVIII. under the heading Tactical Exercises on the Ground.

X. The drafting of reports of all kinds, such as despatches to superior headquarters, or to the Government at home, intelligence reports, staff diaries, &c.

XI. The solution of administrative problems when the general plan has been decided upon, such as:

(*a*) The embarkation, disembarkation, and transportation of troops by sea, river, canal, or lake. The loading, unloading, and transportation of supplies of all kinds.

(*b*) The necessary provision for wastage of war, including calculations regarding the number of reinforcements, amount of ammunition, &c., which should be at all times collected at the advanced depôt, at the base, and, in cases like India and South Africa, coming across the sea.

(*c*) The administrative organisation of a seaport, either for embarkation or disembarkation, of a railway centre for entraining or detraining, of a line of communications with its base, defended posts, and advanced depôts.

(*d*) The collection and distribution of local supplies of all kinds, including remounts, transport animals, waggons, bicycles, motor-cars, telegraph and telephone instruments, &c.; places where they are to be collected, how they are to reach the troops, and how they are to be withdrawn if the locality has to be given up to the enemy.

(*e*) The collection and distribution of civilian labour, its organisation into corps, feeding, discipline, provision of tools, supervision, medical and sanitary requirements, formation of camps, &c.

(*f*) The disposal of prisoners of war, their escort, food, clothing, blankets, tents, medical and sanitary requirements.

(*g*) The disposal of military prisoners under long sen-

tences, the establishment of the necessary prisons or detention cells whilst moving down to the base, the system of escorts.

(*h*) Details regarding postal and telegraph services, censors, precedence of military telegraphs, clearing the line, &c. Escorts for and defence of important telegraph lines.

(*i*) Military correspondents and foreign attachés.

XII. Intelligence. Secret service agents, field intelligence with the troops, information from inhabitants, home and foreign press.

The above are given as a general guide merely to remind officers on the directing staff of the numerous administrative problems which crop up daily during all military operations in front of the enemy. Some of them would not be dealt with in an ordinary divisional Staff Ride, but they are inserted here because at any moment a division acting alone might be in want of any one of them, and the staff would be compelled to take steps to ensure that the requirements were met. Examples will be found below of the type of problem which could be given under each of the above headings.

It is very important that the staff officers under instruction should be given interesting as well as instructive work, and both the interest and the instruction depend greatly upon the comprehensive nature of the orders they receive for executing the reconnaissance. For example, a staff officer may be sent out to reconnoitre a position for defence in the neighbourhood of some specified locality, without being informed of any details as to the number of troops which are available to hold it, the intentions of the commander, if it is eventually to be occupied, or the general situation as regards the line of retreat, the probability of counter-stroke, &c. Similarly an officer may be

sent to reconnoitre a hostile position with a view to attack, and, not knowing the general situation, will devote his energies to working out an elaborate advance against a flank which could not be attacked owing to the direction of the line of retreat or the distribution of the troops. Again, in an administrative problem, an officer might be called upon to make all arrangements for entraining a division at a certain station without being given any details regarding the number of trains per hour which could be received and dealt with at the detraining station. Or an officer might be detailed to arrange an outpost line without being told where it was intended that the troops in bivouac should fight if the outposts were attacked.

The object of all reconnaissance is to place the commander in a position to deal with a certain definite problem. The reconnoitring officer therefore must study the locality from the point of view of that problem alone. His report, if he writes one, should include such matters as affect the object, and nothing else. It is essential, therefore, to provide him with sufficient information to enable him to deal with the problem in a concise but comprehensive manner.

The following examples, based on situations which would be likely to arise during the Staff Ride described in Chapter V., may be useful to explain more fully the type of instructions which should be issued to reconnoitring officers.

In this scheme, as worked out in the general and special ideas, which were intended for a divisional Staff Ride, there would be no scope for an exercise under heading I., "The general reconnaissance of a theatre of war or of a large area of operations." In fact, it has only been inserted to complete the list. The instructions to reconnoitring officers would include a statement of the proposed alternative plans of campaign, and special attention would

be called to the details that required the most careful investigation.

Under Heading II., "The reconnaissance of an area for a definite strategical object," the scheme as described in the special ideas would again be unsuitable; but for a larger Staff Ride, where the operations of the whole of the opposing forces north of the Galty mountains were being dealt with, an instructive exercise could be found.

If the Red force was driven back from its position about Kilmallock it would be necessary for the commander to possess a detailed military reconnaissance of the area Listowel, Killarney, Mallow, Rathkeale, an area 35 miles by 30, or over 1000 square miles. It would be quite impossible, in the short time available, for one officer to carry out a thorough reconnaissance of the whole of this area, so it would be necessary to limit the scope of his work by directing him to report on a few salient points.

If the area is to be used as a theatre of operations by Red, it will mean that the Red army has been driven back. The commander, when retiring, will wish to know what direction he should take in order to gain a good strategical position from which to continue the struggle. The most important duty of the reconnoitring officer would be to discover this strategical position by a careful study of the available roads, of the physical features, and of the railways running westwards by which the Red army could be supplied. A good deal of the reconnaissance can be done on a map if there is a good one available, and wherever there are railways there is usually a fairly good road map, which shows at least the main roads, as in Spain or the Balkans. A glance at Sketch No. 15 will show that Tralee is an important strategical point, because of the railways running west at and just south of that place.

The main object of the reconnaissance in this case would

be to select a strategical position which would cover Tralee, which would render offensive operations possible, and which would involve the enemy in difficulties. In fact, such a strategical position as that at present occupied by the Red force about Killmallock.

The instructions to the reconnoitring officers might take the following form (*see* Sketch No. 15).

EXAMPLE No. 1.

You are directed to reconnoitre the country in the area Listowel, Killarney, Mallow, Rathkeale, with a view to discovering:

(*a*) The best line of retreat for the Red army if it is driven back from Kilmallock.

(*b*) The best strategical position which can be taken up in order to again assume the offensive against the Blue army.

2. The railway running west from Tralee must at all times be covered, and roads must exist for supplying the army from that railway. It must be ascertained whether there is any locality on the line of retirement where the enemy will be compelled or may be induced to make detachments, either to cover his line of communication, or because sufficient roads are not available for his whole army, or for any other reason.

3. Any tactical difficulties must be ascertained regarding the nature of the country—*i.e.*, very hilly, enclosed, boggy, &c.; and any administrative disadvantages, such as the local supply of water, forage, fuel, or the condition of the roads, should be brought to light.

4. Three officers and two motor-cars are placed at your disposal to assist in the reconnaissance.

5. Your report must be handed in at army headquarters at 5 P.M. on June 16.

An officer receiving these instructions would know

exactly what to do. He would study the map to discover where such a strategical position was likely to be found if the army retired along the northern, central, or southern roads in the area, and he would divide the work between himself and his three officers.

III. The reconnaissance of a railway system, &c.

The scheme described in the special ideas would not permit of an exercise under this heading, but if the operations of the whole of the opposing forces north of the Galty mountains were being dealt with, a simple exercise would be available on the Blue side. The Blue commander, advancing across the river Suir, would be anxious to get at least one line of railway into working order as rapidly as possible. In the special idea, Blue, it is stated that the railway has been repaired as far as Ballybrophy Junction, and some other details are given. The question now arises whether it would be better to use the Roscrea–Limerick line, the Thurles–Kilmallock line, or the Thurles–Clonmel–Caher line.

It would be necessary to give the reconnoitring officer a brief statement of the general intentions of the Blue commander, and then to inform him where he will find the railway destroyed. In war this would be discovered by reconnaissance, but in a peace exercise the destruction must be imagined. The Roscrea line would be too far off to visit during a Staff Ride, it would take too long to get there and back, but the scheme explained in the following instructions would prove an interesting problem (*see* Sketch No. 15).

EXAMPLE No. 2.

1. The Blue army is about to advance and drive back the Red army towards Tralee.

2. The Roscrea line is reported to be intact as far as Limerick, and thence towards Tipperary as far as Oola.

Between Oola and Limerick Junction all bridges have been destroyed, and Limerick Junction itself has been rendered useless, all points having been removed or blown up. The Ballybrophy–Limerick Junction line has a bridge destroyed at Thurles which the engineers are now repairing, and which will be in working order by June 22. Between Ballagh and Limerick Junction all bridges are broken, the piers only remaining. The Fethard line has a bridge broken just south of the junction at Thurles, which it will take four days to repair. All bridges on this line are broken between Fethard inclusive and Clonmel exclusive, the piers having been destroyed also.

3. You are required to reconnoitre these railways and prepare a scheme showing the best, quickest, and safest manner of bringing rail-head as near as possible to the army during its advance on Tralee.

4. The road transport now in use from Ballybrophy Junction to Cashel brings in supplies daily for two divisions and one cavalry brigade; the road transport from Kilkenny supplies the remainder of the army. The greater part of this transport will be available for use from rail-head when the latter is nearer to the army.

5. Two officers and one motor-car are placed at your disposal to execute the reconnaissance. Your report will be handed in at Tipperary at 5 P.M. on June 16.

When working out the above scheme it would not only be necessary to compare the time required to repair the various lines. The strategical effect on the army of using the northern, central, or southern line, and the safety of each, would have to be considered. The great object would be to reduce the length of road that had to be covered by wheeled transport, so that available roads leading from each line to the army must also be compared.

Two of the officers would probably go by train, and one in the motor, the latter being used for that part of the railway which it was difficult to reach by train. The officers must exercise their imagination as regards the bridges which are supposed to be destroyed, but sufficient data is given for them to work on.

IV. Strategical and tactical reconnaissances.

The situation described in the general and special ideas, Chapter V., Red, would afford an example of a reconnaissance under this heading. The officer commanding the Red detachment which was sent towards Caher would require to know the strategical and tactical possibilities of the ground south and just east of the Galty mountains.

The instructions for such a reconnaissance would commence with a statement of the strategical object, and then call attention to the various matters which would require particular investigation (*see* Sketch No. 15).

Example No. 3.

1. The Red detached force about Caher is required to compel the enemy to make a still larger detachment to the south or south-west, and thus weaken his main army, thereby affording our main army an opportunity of concentrating a superior force against him, the greater part of the Red detachment being always ready to join its main army *via* Ballylanders.

2. The Galty mountains on our left flank will be the chief means whereby the above strategical object can be gained. The operations of the Red detachment will probably take the following form:

(*a*) A strong position is now being occupied, north of Caher, to compel the enemy to detach a large force to attack it.

(*b*) When this attack develops, the Red detachment

will fall back, endeavouring to draw after it as many hostile troops as possible.

(*c*) Later on the Red detachment will assume the offensive to prevent Blue from merely observing it.

(*d*) It will at all times be prepared to rejoin the main Red army *via* Ballylanders.

3. You are required to reconnoitre the area Caher, Galty mountains, Mitchelstown, Knockmealdown mountains, Clogheen to the river Suir, and ascertain the best direction for the Blue detachment to fall back from Caher. You will discover suitable positions to occupy where defence is strong and offence is easy.

4. You will pay special attention to the following points:

(1) The protection afforded by the Galty mountains to the northern flank of the Blue detachment if it retires direct on Mitchelstown and Ballylanders.

(2) The facilities for rejoining the main army if the country appears to favour a retirement southwards on the Knockmealdown mountains, and thus occupy a flank position against any hostile troops moving from Caher towards Mitchelstown.

(3) The nature of the country from a tactical point of view, especially as regards the action of artillery, the possibility of seeing the enemy's movements at a distance, the facility for manœuvring with all arms, and the state of the roads for supplies to be brought from Ballylanders or Mitchelstown.

5. Two officers and one motor-car are placed at your disposal for this reconnaissance.

6. Your report will be handed in to the headquarters of the Red detachment at Caher at 5 P.M. on June 16.

V. The reconnaissance of an area purely for tactical purposes.

An example of this will be found on the Red side (*see* Sketch No. 1). The officer commanding the Red detachment sent to Caher, having made the general strategical and tactical reconnaissance dealt with above under IV, would decide upon the direction of his retreat when he fell back from the vicinity of Caher. We will suppose that he has decided to retire direct towards Kilbeheny. He would then require detailed information regarding all tactical positions which could be held between Caher, Kilbeheny, and the passes south and south-east of Ballylanders.

This reconnaissance might be divided amongst two officers, one dealing with the country between Caher and Kilbeheny, both inclusive, where the Red detachment would be facing generally east, and the other between Kilbeheny and Ballylanders, where the detachment would be facing south. Similar instructions would be given to each officer, so we will deal with the first reconnaissance only, the instructions for which might take the following form:

EXAMPLE No. 4.

1. In accordance with his instructions to threaten the enemy's southern flank and compel him to detach a large force to guard it, the Red detached commander has decided to withdraw from Caher when heavily attacked and retire towards Kilbeheny, and, if necessary, over the passes towards Ballylanders.

2. You are required to reconnoitre the country between Caher and Kilbeheny, and ascertain what positions exist which are suitable for occupation by the Red detachment under the following conditions:

(*a*) To hold strongly if attacked by a superior force.

(*b*) To advance and attack the enemy if the latter merely holds the Red detachment with a small containing force.

3. The line of retreat and supply by Kilbeheny or Mitchelstown to Ballylanders must always be covered; alternative positions should be compared, and those which appear to be most suitable should be reported upon in detail (*vide* VI.).

4. One officer and one motor-car are placed at your disposal to execute this reconnaissance. Your report will be handed in at Caher at 5 P.M. on 17th.

The above reconnaissance would be more suitable for the third day of the Staff Ride, after the strategical and tactical reconnaissance described in IV. had been carried out on the second day.

A reconnaissance under the same heading could be made by Blue officers on June 16, the second day of the Staff Ride.

The Blue detached commander would be uncertain regarding the strength of the Red force about Caher, and whilst arranging to carry out his instructions would take steps to ensure that if he was attacked by a superior force from Caher he would be ready to stand on the defensive. For this purpose he might order the following reconnaissance on June 16 (*see* Sketch No. 1):

EXAMPLE No. 5.

1. The Blue detachment will assemble during the day north of Newinn, with a view to advancing on 17th to drive the Red troops from Caher.

2. In the event of the enemy developing a superior force at Caher, you are directed to reconnoitre the area Golden, Cashel, Rose Green, and thence west to the Suir, and select a suitable defensive position, covering the Golden–Cashel main road, with the western flank protected to some extent by the river Suir.

3. One battalion and one squadron, line of communication troops, have been ordered to occupy Golden and defend the bridge there. They will arrive early on June 17.

4. One officer and one motor-car are placed at your disposal for this reconnaissance. Your report will be handed in at Tipperary at 5 P.M. on June 16.

Most of the above reconnaissances of areas would form suitable tasks for the officer commanding the force. He is not usually called upon during the Staff Ride to write reports and make sketches, but the result of his work is apparent in the appreciations of the situation and in the orders which he prepares in the evening. It will be noticed that motor-cars are allotted to officers for the above schemes in a somewhat lavish manner. This has been done because it is a very lengthy operation to reconnoitre an area of country without a motor. It means that the whole area has to be divided up and each portion given to some officer. When this is done the bird's-eye view of the whole district, which it is important to obtain, is lost. Each officer considers his own little bit of ground important, and he selects positions, &c., which do not really fulfil the requirements of the case.

The commander of the force is usually given a motor for himself and his staff, and therefore he is in a better position to carry out reconnaissance work of the above nature than the other officers. Of course, if motors are available, it is very good practice for other officers to execute these reconnaissances and for the commander to base his plans on the result of their work.

Instructions for other work suggested in V. could be prepared in a similar manner.

VI. Detailed reconnaissance, either tactical or adminis-

trative, of a locality already roughly selected for the purpose in view.

The majority of reconnaissance work done during a Staff Ride comes under this heading. The method of preparing the instructions is similar to that already described, and it will be sufficient to give a few examples merely as a guide.

A reconnaissance for attack, Red (*see* Sketch No. 1).

Whilst the ground between Newin and Caher is still in the possession of the Red troops, it would be useful to reconnoitre any positions that a hostile containing force might occupy later with a view to attacking it. To produce good results it is necessary for the reconnoitring officer first of all to examine the position from the point of view of the defence, and ascertain how the enemy is likely to defend such a position. Having done that, he can turn his attention to the best manner of attacking it.

This reconnaissance of ground with a view to attack whilst it is still in our possession is most useful, and is sometimes neglected both during a Staff Ride and in war.

On the Red side we know that the commander intends to attack northwards on 17th if he is not himself attacked (*vide* paragraph 4, special idea, Red, page 116); it would be advisable, therefore, to reconnoitre the ground whilst he is still in possession of it. A similar reconnaissance would be desirable of any positions which the enemy might hold south-west of Caher after the Red detachment has retired and wishes again to attack.

The instructions might take the following form:

EXAMPLE No. 6.

1. In the event of the Blue commander marching west and leaving only a containing force to guard his

communications, it will be necessary for the Red detachment to attack this force.

2. In this case the enemy will probably occupy a defensive position in the vicinity of ——. You are directed to reconnoitre this position and report upon the best manner of attacking it.

3. From a strategical point of view the enemy's west flank will be more vulnerable than his east flank, but the Suir river may prohibit any attack on his western flank.

4. The river as an obstacle to guard the left flank of our attack and the suitability of the action of cavalry to guard our right flank or protect any turning movement should be considered.

5. It should also be ascertained whether heavy guns placed on the north-east slopes of the Galty range on the right bank of the river Suir would be able to support the attack.

6. Your report will be handed in at Caher at 5 P.M. on June 16.

The following administrative reconnaissance would also be useful on the Red side:

EXAMPLE No. 7.

1. Instructions have been received that after noon on 17th the Red detachment at Caher will be supplied from Mitchelstown railway station.

2. You are directed to reconnoitre this station and report on its suitability, stating what additions, alterations, and arrangements are necessary to enable the supply columns of the Red detachment to load up and convey supplies to the regimental supply waggons, and to form a clearing hospital which will arrive there by train at 8 A.M. on 17th for the use of the Red detachment at Caher.

3. You will also suggest methods for securing the safety of the supplies when they arrive, and for policing the town.

A reconnaissance for signalling purposes is sometimes necessary. The Red commander at Caher might wish to supplement his telegraph by establishing visual signalling between the two battalions on the Ballylanders Pass and his headquarters at Caher. The officer detailed for this work would be instructed to reconnoitre the country, select signalling stations, as few as possible, decide how they could obtain food, water, and shelter, and in some cases how they should be protected. The inhabitants would be questioned as to the prevalence of fog or mist on the summit of the hills as compared with the lower spurs. If possible, the line of signalling stations should be near the line of the telegraph, so that any breaks in the latter could be rapidly repaired by the signallers. All posts must, of course, be carefully hidden from the enemy.

A reconnaissance of the roads from Mitchelstown to Caher, with a view to selecting the best, for the transport of supplies.

A reconnaissance for a defensive position to be occupied by the Red detachment on 16th. This reconnaissance in war would probably be made on 15th, but as an exercise it can be done on 16th. The instructions might take the following form:

EXAMPLE No. 8.

1. The commander of the Red detachment has decided to occupy a defensive position roughly on the line ——, ——, ——. If he is not attacked on 17th, he will advance northwards from this position and attack any hostile troops that are encountered.

2. The 7th cavalry brigade will detach one squadron to

watch the western flank of the position and patrol towards Tipperary and Golden; the remainder of the brigade will guard the eastern flank of the position.

3. The remainder of the Red detachment will be available to defend the position. One infantry brigade should be held in general reserve.

4. You are directed to reconnoitre this position, forward suggestions for its occupation, for the positions of the local and general reserves and for the artillery, the general scheme of infantry and artillery defence being carefully worked out.

5. The position will also be studied from the point of view of an easy withdrawal in the event of the enemy developing a greatly superior force to attack it. In this case the Red commander intends to retire through Caher, drawing the enemy after him, and taking up another position facing east, to the west of Caher, or possibly along the river Suir.

6. The method of retiring across the Suir will also be considered, and the locality for the construction of extra bridges decided upon if necessary.

7. Three officers are placed at your disposal; one of these will be detailed for the work mentioned in paragraph 6.

8. Your reports will be handed in at Caher at 5 P.M. on the 16th.

Another useful reconnaissance in connection with the above would be to make all arrangements for battle administration. The position of the tent divisions of the field ambulances, having regard to the localities where the casualties will be heaviest, and the type of road or country to be traversed by the bearer divisions—in fact, everything connected with the collection and conveyance of the wounded by the bearer divisions to the tent divisions, and their final disposal.

The instructions for this reconnaissance might take the following form :

EXAMPLE No. 9.

1. You are directed to reconnoitre the ground in rear of the defensive position which is now being prepared on the line ——, ——, ——, and report on the best method of conducting the administration of the fighting troops during battle.

2. You will suggest positions for the tent divisions of the field ambulances and of the cavalry field ambulance, having regard to localities where the casualties are likely to be heavy, and the type of road or country to be traversed by the bearer divisions when collecting and conveying the wounded to the tent divisions.

3. You will ensure that the wounded, the ammunition waggons, the reserves, and the horses going to water do not block up the various roads or tracks available.

4. Arrangements should be made for collecting and clearing a larger number of casualties than the field ambulances can deal with.

5. A clearing hospital has been established at Mitchelstown railway station.

6. A position for the second line transport will also be selected, where it will be well clear of the fighting troops in the event of retreat, and sufficiently close to bring up supplies, blankets, &c., when required.

7. You will also ascertain the best manner of establishing lateral signalling communication behind the line of battle and back to the second line transport.

8. Your report to be handed in at Caher at 5 P.M. on 17th.

It will be impossible for a reconnoitring officer to execute the above task until all decisions have been arrived

at regarding the method of occupying the position. The position of the ammunition columns can hardly be decided by any one but the General officer commanding the artillery of the division. The remainder of the scheme of battle administration must depend on that and on the position of the reserves. If the position is likely to be occupied for more than one day, further instructions must be given to the reconnoitring officer regarding arrangements for the disposal of the dead, both men and horses, the supply of drinking water, fuel, and forage, the sanitation of the battle-field, and the possibility of obtaining materials for shelters.

Similar reconnaissances for the officers on the Blue side could easily be arranged.

The Blue commander advancing south from Cashel on 16th would encounter hostile outposts about Newinn. These having been driven in, the enemy's main position might be disclosed, and it would be necessary to reconnoitre the ground for attack. The instructions to the reconnoitring officer might then take the following form:

Example No. 10.

1. The 18th division advancing south from Cashel, having driven back the enemy's outposts about Newinn, is now occupying a position of readiness in the vicinity of that town, with outposts on the line ——, ——, ——, in close contact with hostile troops.

2. You are directed to reconnoitre the enemy's position so far as it can be seen from our outpost line, and suggest the best means of attacking it.

3. The enemy's western flank is the weakest from a strategical point of view, but the river Suir on that flank may prohibit any heavy attack on that side.

4. You will pay particular attention to the various tactical points in front of and on the enemy's position,

and discover how their successive capture will facilitate the defeat of the enemy and the advance of our own troops.

5. Owing to the river Suir, which will protect the western flank of the attack, it is intended to mass the greater part of the cavalry on our eastern flank.

6. A position should be selected for immediate occupation by a rear-guard, in the event of the enemy developing greatly superior numbers. His strength at present is believed to be inferior to our own, but this may be incorrect, and a retirement to a defensive position already selected about —— may become necessary.

7. Two officers are placed at your disposal to assist in this reconnaissance. Your report will be handed in at Tipperary at 5 P.M. on 16th.

Example No. 11.

An administrative reconnaissance of the area mentioned in Example No. 5 could be carried out by Blue officers during June 16, to collect available supplies of food, forage, fuel, and local transport, and bring it into Cashel, where the regimental supply waggons could load up on June 17. It is better not to collect local supplies in the bivouac occupied by the fighting force, because it blocks up the roads, and if a sudden retirement is necessary the supplies are usually captured by the enemy. The instructions for such a reconnaissance should contain information as to how the supplies are to be collected, whether by local tranport obtained on the spot, or by military transport. An escort for the reconnoitring officer should be provided, of sufficient strength to enable him to detach men for the purpose of superintending the loading and conveyance of the supplies to Cashel.

The bivouacs and outposts of the Blue force for the night of 16th–17th could also be reconnoitred, because in real war there would be sufficient time to do it during the afternoon of 16th, after the Red outposts had been driven back.

Instructions for these reconnaissances are suggested as follows:

EXAMPLE No. 12.

1. You are required to select suitable bivouacs for the Blue force, covered by strong outposts.

2. The position of the troops is as follows. Here would follow a description of where the various forces would be located, say, at 2 P.M. on 16th.

Note: Instructions for this reconnaissance and that for the attack described previously might be prepared by the assistant director, because he would know the strength of the enemy, and could estimate roughly the course of events during the advance of the 18th division from Cashel on 16th. The officers in each case could commence their reconnaissance in the morning, though in real war they would not be able to do so until the enemy's outposts had been driven back.

3. The 4th brigade will arrive about — P.M. and will join the general reserve at ——.

4. A fighting position for the troops in bivouac must be selected in the event of the enemy attacking at dawn. The outposts should cover this position, and, if necessary, part of it may be occupied by troops from the main body.

5. One officer is placed at your disposal to assist in the reconnaissance. Your report will be handed in at Tipperary at 5 P.M. on 16th.

Reconnaissances for administrative purposes can be ordered in the same manner as those suggested for the Red officers. If a reconnoitring officer knows what he

has to do, why the troops are to be employed in this manner, and is given any special instructions demanded by the situation, he should be in a position to produce valuable work; otherwise he will fill his report with a lot of unnecessary detail and will not pay sufficient attention to the really important points.

Enough has been written to explain the instructions which should be issued to reconnoitring officers, and we can now turn to the work which officers should be given during the evening.

It is not very important to issue careful instructions to officers for their evening work. The assistant director is on the spot, and any officer who does not understand what is required from him can easily obtain verbal elucidation.

In the particular Staff Ride we are discussing the following problems, in addition to the necessary orders and appreciations, would afford instructive work for the officers on the Red side.

A scheme for supplying the Red detachment during the operations south of the Galty mountains. This would include the amount of food, forage, ammunition, &c., that it was desirable to collect at Mitchelstown station, or to bring closer to the Red force. Where the transport was to come from to convey these stores to the troops. The telegrams it would be necessary to despatch to bring these stores to Mitchelstown so as to arrive at the time they were required, and whom these telegrams would be sent to.

A scheme for collecting intelligence from the inhabitants, even when their towns and villages are occupied by the enemy. The method of collecting this intelligence so that it is available in sufficient time to be used. What payment is to be made for such work, any reliable system of signalling which can be established, &c. &c.

The organisation of Mitchelstown as an advanced depôt for the Red detached force, after it has been reconnoitred

as previously suggested. A scheme for the collection of civilian labour to assist in the preparation of defensive positions between Caher and Kilbeheny, their organisation, payment, provision of the necessary tools, &c.

A scheme for evacuating the tent divisions with the force, and the clearing hospital at Mitchelstown, of sick and wounded. The establishment of temporary local hospitals in the event of a large number of casualties, the type of building to be used for the purpose, the provision locally of medical practitioners, suitable beds, bedding, and all other requirements, so as to avoid depleting the field ambulances or the clearing hospitals.

On the Blue side similar schemes could easily be found by consulting the list of examples given above under the headings VII. to XII.

Notes on the method of criticising and working out these problems are contained in Chapters XIII. to XVI.

CHAPTER XII

THE METHOD OF PREPARING NARRATIVES

A good deal of the interest and instruction of a Staff Ride depends on the "narrative of events and summary of information" issued daily to the officers.

It has been found by experience that, as a rule, only one narrative can be issued daily, and that the best hour for issue is after the officers have completed their work on the ground, generally about 5 P.M. The only exception to this rule is when one or both sides undertake night operations. A supplementary narrative must then be issued at 9 A.M. the following morning. In real war events occur and information comes in at all hours of the day and night, and the various commanders take action accordingly, but during a Staff Ride it is impracticable, and perhaps even undesirable, to attempt to practise this method. It would require constant reference between the director, who alone knows the situation on each side, and the assistant directors. Instead of working on the ground, the commanders on each side must stay in one place, the troops are not present, and the Staff Ride would become a sort of war game on the ground. Every one knows the delays which occur during a war game where the opposing officers are in two rooms close together, and where the director is also close by. If this war game is transferred to the ground the delay in communication will be much greater. Officers would be waiting for hours for the various

decisions, and meantime would have nothing to do. During manœuvres this system can be practised, because the troops are on the ground and the numerous umpires can give immediate decisions regarding local events, but even at manœuvres it is generally necessary to issue each evening a narrative of events, so that the next day's operations can be continued in a realistic manner.

During a Staff Ride there are no troops, and there is no necessity for any troops, because the duties of commanders and of staff officers deal chiefly with orders and arrangements which have to be made before the troops act. The object should be to produce a series of situations, each situation being issued at 5 P.M. daily; the officers will deal with these situations, and with nothing else. A tactical exercise on the ground, without troops, is conducted in exactly the same manner, as will be shown in Chapter XVIII., except that the various situations are issued at short intervals of time.

The most common errors in a narrative are failure to describe in sufficient detail the events which have occurred, and the omission of important information which a commander would be certain to obtain in real war. Some imagination is required in the preparation of these narratives, and all rulings and decisions must be purely arbitrary. The director when making his decisions should consider the military situation and the nature of the ground. His main object should be to check the rapid movements, either by rail or in front of the enemy, which are frequently suggested by the commanders. He should penalise mistakes, by recording heavy casualties and by deciding that impossible or badly prepared attacks have failed. It is most important that officers should not be allowed to do things on a Staff Ride which they would not even suggest in real war, otherwise the instruction will do more harm than good. The most common mistakes that are made in

the conduct of the operations by the commanders on a Staff Ride are:

(1) Extraordinary speed in embarking, disembarking, and moving troops by rail.

(2) Extraordinary speed in marching troops from one part of a theatre of war or of a battle-field to another.

(3) Hazardous movements in front of an enemy, without special arrangements for securing the safety of the operation.

(4) Absence of arrangements for supplying the troops with food or ammunition, or for the care of the wounded.

(5) Ambiguous or incomplete orders.

(6) A false strategical or tactical conception of the situation, involving plans which are opposed to the principles of war.

(7) A tendency to assume a more favourable situation than that described in the scheme.

It is not sufficient to call attention to these mistakes when dealing with the work; it is essential when preparing the narrative that they should be emphasised by recording failure. War is an illusive science, and it is easy to bring forward specious arguments to show that some wild scheme is perfectly sound. It is even possible to quote incidents of history in support of the arguments, but during a Staff Ride it is best to assume the most difficult situation in each case, and thus approach more closely to the ordinary conditions of war.

There is no doubt that on some occasions in actual war the troops have been embarked, disembarked, marched, and manœuvred with extraordinary speed and temerity; but these occasions are rare, and are invariably accompanied by excellent staff arrangements, a great commander, and first-class troops. In ordinary war something usually goes wrong: there are delays in administration, the issue of orders, and in their execution; and it is probably a good plan to multiply by two the time suggested in any

paper calculation for the actual completion of an operation.

A Staff Ride is pre-eminently an exercise in command and staff work, and as such the difficulties which arise in war should not be slurred over or minimised, but, on the contrary, they should be brought prominently to the front, so that officers may learn how to deal with and overcome them.

One narrative must be issued daily to each side. As in the special ideas, this narrative should contain no information which a commander is unlikely to possess in real war. A clear statement of the operations and the exact position of the troops at night should be included. Any unit which had been forgotten in the original orders should be shown in the narrative at the place where it was before the orders were issued, and the commander should not be allowed to use that unit till sufficient time has elapsed for the troops concerned to move to the place assigned to them.

It will be necessary for the director's staff to check most carefully the orders and administrative arrangements made by each commander, to discover if every unit in the force would know what to do and where to go. When the troops were last fed, where the food came from, how the forage for the horses was obtained, what reserve of supplies still existed in the regimental supply waggons, the supply columns, and supply park. How much ammunition had been expended, and how it was to be replaced. What was being done with the wounded, and whether it had been necessary to leave behind a battalion or brigade to take care of them, just as Napoleon was compelled to leave a whole division at Ligny.

It is only in this way that the commanders and staff officers on a Staff Ride can be induced to pay proper attention to war administration. Every one is interested in the strategy and tactics of the Ride, but administration

is dull work. Yet in war this dull work is the very essence of success. Wellington is reported to have said that he might not be a good General, but he was sure that he was an excellent commissariat officer. If we study past campaigns and battles we find failure in administrative work far more frequently than in strategy or tactics. The books say little about administration, because many readers would not be interested in it; we find, in consequence, that whilst volumes are devoted to strategy and tactics, pages only are devoted to administration, though the latter is the very life and soul of the former.

The narrative should commence with an account of the events which had occurred during the day, and then give the position of all the troops and, so far as it would be likely to be known, the strength and position of the hostile forces. A statement of the information received during the day should then be appended. This statement will demand the exercise of a good deal of ingenuity and imagination on the part of the directing staff. If we endeavour to gain assistance from examples in real war, we shall find that the reports received during the day by a commander who is actually engaged with the enemy are so numerous that we cannot attempt to reproduce them in the narrative. We must content ourselves, therefore, with a sort of bird's-eye view of the whole of the information which the commander would be likely to receive, in similar circumstances, in war. Some of this information may be false or misleading, just as it is in war; some may be very vague both as to time, place, and numbers; and some may be accurate.

The object is to give the commander an interesting problem to work out for the next day's operations, and not to attempt to reproduce the numerous messages he would receive in war.

It is, of course, impossible to prepare a narrative with-

out consulting the orders written the night before by each commander, but the imaginary narratives given below are based on a situation which might arise on the evening of June 17, during the Tipperary Staff Ride. A certain number of mistakes and omissions in the orders and administrative arrangements of each commander are assumed, to show how they may be penalised in the narrative.

It is impossible to say what the situation at 5 P.M. on 17th would be without knowing the orders of each commander on 15th and 16th, but for the purposes of our example we will assume that on 16th the Blue detached force drove back the Red outposts, and occupied Newinn, the Blue cavalry gaining Clerahan. On 17th Blue attacked the Red force, and the Red commander, believing that two divisions were opposed to him, commenced to withdraw through Caher directly the Blue main attack developed, and left the Suir bridges at Caher intact. The Red commander then took up a position about two and a half miles west of Caher, facing north-east, ready to attack Blue on 18th. The Blue force occupied Caher, with outpost on the right bank of the Suir, in touch with Red outposts.

NARRATIVE OF EVENTS AND SUMMARY OF INTELLIGENCE.
Up to 5 P.M. on June 17.

RED.

1. At 4 A.M. on 17th the Red detached force was heavily attacked in its position north of Caher. The Red commander, believing the Blue force to be greatly superior in numbers, commenced to withdraw towards Caher, leaving one infantry and one artillery brigade to cover the retirement.

2. The second line transport of the Red force, which on 16th had been kept close in rear of the position, had

received no orders the preceding evening to retire; consequently they blocked the retreat of the Red troops, and it became necessary to gain the required delay by reinforcing the rear-guard with another infantry and another artillery brigade.

3. By 4 P.M. the whole of the Red force had withdrawn across the Suir at Caher, except the field ambulance attached to the brigade originally on rear-guard. This field ambulance had opened just north of Caher, but it had received no orders to retire, and did not discover that the whole force had withdrawn till it was too late.

4. The cavalry brigade retired on Arfinnan, which they are now holding. They report that they were opposed during the day by a superior force of hostile cavalry, but were able to hold their own until the withdrawal of the infantry compelled them to fall back. They are now opposed to hostile cavalry north-east and east of Ardfinnan, the squadron at Newcastle being in contact with hostile patrols.

5. The enemy occupied Caher about 4.30 P.M., and pushed outposts across the Suir. Meanwhile the Red force had occupied a position extending from —— to ——, with the 22nd infantry brigade and one artillery brigade on the right, the 23rd infantry brigade and one artillery brigade on the left, and the remainder of the division in reserve. The Red outposts, furnished by the 22nd brigade, are occupying the line ——, ——, ——.

6. No arrangements were made by the 23rd brigade on 16th for filling up the empty supply waggons. The supply columns are now at Clogheen, in accordance with the orders of the G.O.C. Red force. The 23rd brigade have, therefore, no rations for 17th.

7. Information has been received from the inhabitants that the enemy's force advancing on Caher consists of two infantry divisions and a cavalry brigade. Look-out men

posted with telescopes on the eastern ridges of the Galty mountains, report that they have seen three infantry brigades and a lot of artillery moving down the Newinn–Caher road during the afternoon, and estimate the enemy's force at one division.

8. An officer who was taken prisoner during the action managed to escape: he swam the Suir, and reports that the enemy are delighted with their success; they believe there is only one Red brigade in front of them. He states further that they have got at least two brigades and probably a division, but he does not think they have more.

9. A message from an officer's patrol sent on 16th to Bansha reports that at 1 P.M. a column of troops about five miles long passed through Kilfeakle between 12 noon and 2 P.M., marching towards Tipperary. A telegram from the commander of the Red main army states that there is every indication that the enemy's main army is moving east, and that only a small Blue detachment is left at Caher.

10. Bivouacs for the Red force have been arranged as follows: 22nd brigade at ——, 23rd brigade at ——, &c. &c. The cavalry brigade has one regiment on the left bank of the Suir, covering the Ardfinnan bridges, and one squadron at Newcastle, also on the left bank. Remainder on the right bank at Ardfinnan. One squadron on the eastern slopes of the Galty mountains north-west of Caher, in contact with hostile patrols from Caher.

11. The Red casualties during the day amount to 175 men, including 53 prisoners who were captured during the retirement.

NARRATIVE OF EVENTS AND SUMMARY OF INTELLIGENCE.
Up to 5 P.M. on June 17.
BLUE.

1. The 18th division, 45th brigade, and 9th cavalry brigade attacked the enemy's position north of Caher at

4 A.M. on June 17. The position at first appeared to be weakly held, but at about 6 A.M. strong reinforcements arrived. About noon it became apparent that the enemy were retiring; the attack was pressed and the position carried by 2.30 P.M.

2. The 52nd infantry brigade and the 22nd field artillery brigade were at once sent forward to pursue the enemy, seize the bridges at Caher, and occupy a position on the right bank of the Suir covering the bridges.

3. The cavalry brigade report that they have been opposed by superior hostile cavalry throughout the day, but that when the enemy's infantry withdrew from the position north of Caher the Red cavalry also fell back and occupied the ground round Ardfinnan, where they were reinforced by infantry and artillery. Newcastle was also held by Red cavalry or infantry. One squadron has been detached to Newcastle, and the remainder of the brigade is in contact with the enemy north-west of Ardfinnan, but are unable to drive them back.

4. In accordance with the orders of the 16th, the cavalry field ambulance has been left with the second line transport at Rosegreen, and there is no means of collecting and disposing of the wounded.

5. The supply waggons of the 18th division were ordered to proceed to Cashel at 6 A.M. on 17th and fill up from the supply columns at that place and await orders. They are still there, as no order was given for their return. A small supply column which was sent with the 45th brigade, capable of carrying one day's supply for the brigade, filled up at Cashel during the 17th, and is now at Newinn as ordered.

6. At 5 P.M. a telegram arrived from the commander of the main Blue army directing the G.O.C. 18th division to leave the 45th brigade, one brigade of artillery, and one regiment of cavalry to contain the Red force west of

Caher, and with the remainder of his detached force to march to Tipperary on 18th and join the main army, which was concentrating right and left of Emly station with a view to attacking the main Red army on 19th.

7. The inhabitants at Caher state that the enemy have got a complete division and "a lot of cavalry." Some Red officers were heard saying that they were to march back to Mitchelstown to-night. Other inhabitants of Caher state that the whole of the troops that passed through the town during the day are halted in a defensive position about 2½ miles to the west, and that about 500 civilians have been employed during the last few days in digging trenches on this position. The Red balloon is still up about 2½ miles west of Caher.

8. The exact position of the Blue force at 5 P.M. is as follows: 52nd infantry brigade, 22nd field artillery brigade, and the divisional squadrons are occupying a position on the right bank of the Suir, extending from —— to ——, with outposts now being placed on the line ——, ——, ——. The 54th infantry brigade and 24th field artillery brigade are just east of Caher. The remainder of the Blue force is about one mile north of Caher.

9. Bivouacs for the Blue force have been arranged as follows: Then add a list of suitable places for each brigade, &c.

10. The Blue casualties during the day have amounted to 115 men.

It must be remembered that the above is purely fictitious, and written without any particular attention to the probable orders which would have been issued by the Red and Blue commanders on the evening of 16th. It is merely intended to show the class of thing that is required. It will be seen that the original moves on each side depend entirely upon the orders issued by the opposing com-

manders, but the course of events after this must be improvised by the director, his decisions being arrived at by a consideration of what would be likely to occur in a similar situation in real war.

On the Red side it has been assumed that a hazardous operation of war, a withdrawal in face of a heavy attack, has been decided upon by the commander without sufficient arrangements having been made to ensure its success. The difficulties which would be likely to arise have therefore been inserted in the narrative.

CHAPTER XIII

SUGGESTIONS FOR CRITICISING WORK AND FOR CONDUCTING CONFERENCES

THE object of criticising the work is not to show how much more the instructor knows about the subject than the officer who is trying to learn, but simply to inculcate sound principles of strategy, tactics, and administration. If in the opinion of the instructor a thing is badly done, an argument based on false premises, or a plan constructed on faulty lines, the reason why it is bad should be stated, and a more correct method suggested. If, on the other hand, the work is good, the reason why it is good should also be indicated.

An officer who is told one day that his work is bad, and a few hours later that it is good, when no reason is given for either statement, does not learn much from his efforts; whereas he will learn a great deal if he is placed in a position to compare the good work with the bad, and thus discover what methods to adopt and what to avoid in the future. If we consult a dictionary we shall find that the word "criticism" has two distinct meanings: first, "the art of judging with knowledge and propriety of the beauties and faults of a performance"; and, secondly, "animadversion or censure." It is the first meaning of the word that the instructor should adopt if he wishes that his remarks should bear fruit. Of course it is very easy merely to say that a thing is good or bad, but it requires a careful study of the work to say why it is good

or bad. When looking over work that has been criticised during a Staff Ride, we sometimes find no remarks at all on the work itself, but at the end some one has written: "a good report," "a carefully worked out scheme," "the method of using the cavalry appears to be open to criticism," &c. It is quite evident to the officer who receives these remarks that the instructor is either too busy to look over the work, or that, having looked it over, he has no remarks, either good or bad, to offer. When this is the case it can hardly be said that the instruction is very good or that the Staff Ride is worth the money expended on it.

It might appear from the above that the whole onus of responsibility regarding the instruction imparted lies with the directing staff, but this is not the case. No one can fail to be impressed by the keenness displayed by officers of all arms to learn something about their profession, but it is only human nature for them to prefer praise to blame. Both, however, are valuable, the praise because it encourages officers to do even better, and the blame, because if rightly applied it teaches them what to avoid in future. In most cases officers are sufficiently broad-minded to accept and profit by both the praise and the blame, but there is sometimes a firebrand in the party who can do nothing wrong, and will not allow for a moment that any adverse criticism which is made on his work is correct. Fortunately these officers are rare, but they cause a good deal of trouble to the already overworked directing staff, and are worthy of mention. They are generally people who are very good at argument, and it is a source of joy to them when they succeed in defeating the instructor; not because their arguments are sound—they are generally the reverse—but because the hard-worked assistant director is not gifted with great conversational powers, or because he knows that if he devotes half an hour to an endeavour to convince a man who has not the remotest intention of

being convinced, he will have deprived the remainder of the officers of half an hour's work which is likely to produce useful results.

It is advisable, therefore, for an instructor to avoid such unprofitable arguments, and for the officers under instruction to realise that the instructor may be very bad, but that he knows a little more about the subject than they do; he is doing his best, and in consequence is worthy of some consideration. Some very good instructors with far more knowledge of the subject than the "firebrand" can easily defeat him in any argument, but this again is undesirable. It is a waste of time, and it is apt to bring about a disturbing element into what should be a calm and peaceful discussion of the subject.

There is another class of officer who errs on the other side: he receives some censorious remarks, which he knows are hardly just, but he is too easy-going, or perhaps too diffident, to urge his case. Instructors are not infallible: they are, or should be, always ready to say if they have made a mistake; and an argument brought about in this manner is usually very profitable. The officer has taken one view of a case and the instructor another: both may be right, both may be wrong, or one may be right and the other wrong. It is evident that a question which is open to so many solutions is worthy of discussion, and even if at the end of it half the officers are of one opinion and half are of another, all will have heard both sides of the question and probably will have learnt a good deal.

There is little doubt that all officers have a considerable sense of judgment where the details of a tactical operation are under discussion. For the moment they may refuse to allow even to themselves that they are wrong, but the sound common-sense teaching sinks in. They forget in time that they once held different views on a certain matter, but the right views remain, and on a subsequent

occasion they will bring forward these latter ideas with absolute conviction.

In all forms of teaching, destructive criticism should go hand in hand with instruction, otherwise it is useless. It should be remembered that the solution of a military problem depends so much upon the personal factor, namely, the determination and ability of the commander and his subordinates, on the available information, the valour and reliability of the troops, the *moral* of the enemy, the features of the country, and on other matters of a similar nature, that no definite rules can be laid down beforehand to assist the officers in the performance of their work.

When we are called upon to criticise, we should first ascertain the intentions of the officer and the arguments he used, or the evidence he has brought forward to support his plan. We should then make sure that these intentions, arguments, &c., are radically wrong before making any adverse comments. We should avoid jumping at conclusions, usually the result of a perfunctory study of the work. We should endeavour, first, to discover what is good in the work, comment upon that, and then, after indicating the portion which is open to honest objection, suggest a more suitable scheme.

The chief thing to aim at, when criticising work, is to select the really important points which would lead direct towards success or failure in war. Generalities should be avoided, because, though they are easy to write down, they carry little weight, mean less, and can frequently be defeated without trouble. Severe blame should be reserved, not for bad work, but for what is evidently carelessness. Carelessness in war, on the part of any commander or staff officer, is the one unpardonable and deadly error. We all do bad work when we commence to learn a trade, and improvement depends chiefly on the errors being pointed out in an amiable manner and explanations

afforded as to what ought to be done. Severe censure on bad work, when the officer has done his best, only tends to dishearten him. It is, however, wicked to expect an overworked director or assistant director to spend more time and trouble over a piece of work carelessly performed than has been devoted to it by the officer himself.

When suggesting alternative courses, or improvements in the work, the directing staff should never lose an opportunity of bringing forward some principle contained in the official books of instruction. However highly trained an officer may be, his opinions do not, or should not, carry the same weight as the publications carefully and exhaustively thought out by the highest military authorities. There is even a greater reason why attention should be paid to this matter. The opinions of one officer frequently differ from those of another, whereas the opinion or principle expressed in the official book remains the same until it is changed by the competent military authority. Officers are constantly receiving instruction from different sources, and if one day they are told one thing and another day are given totally opposite views, they will not know what to believe, or what to apply when the enemy is in front of them.

As each piece of work is criticised, the assistant director should take notes of any point which he considers would form an instructive subject for discussion at the conference. In Chapters XIV. to XVI. efforts have been made to describe some of the errors that are frequently made in the work done by officers during a Staff Ride, and to indicate the best manner of approaching the various problems. These chapters may be of assistance both to the directing staff and to the officers under instruction. They are necessarily vague, because each problem must be dealt with according to the factors affecting its solution and the local requirements. These are so numerous and varied

that it is impossible to indicate anything more than the method of approaching each class of work and the pitfalls that should be avoided.

When examining work and preparing notes for the conference, there is no occasion for an assistant director to suggest an alternative plan merely for the sake of adopting an opposite view to that suggested by the officer. There is generally more than one course open to a commander or staff officer, and frequently the respective value of each is a matter of opinion rather than of principle. The commander can only adopt one plan, and if it is fairly sound he should be given due credit for suggesting it. There is no occasion for the assistant director to propose an alternative plan merely to avoid agreeing with the officer and thus obtaining an opportunity to criticise him. It is, however, desirable to suggest an alternative plan if it is obviously better than the one brought forward, or if thereby an instructive discussion is likely to arise.

Directing officers, having seen the special ideas on each side, are apt sometimes to get a fixed conviction as to how a thing should be done. It is then somewhat difficult for them to appreciate the difficulties of an officer who has seen only one side. If directing officers could put out of their minds all knowledge of what the other side was doing, they might find that the commander's plan was better than their own to meet every possibility, though it was not so good to deal with the particular course which the directing officer would know had been adopted by the enemy. Attention to this matter is desirable, otherwise directing officers may bring forward doubtful arguments in support of their own idea.

The evening conference is sometimes looked upon as a bugbear by assistant directors. It would be wrong to suggest that the reason for this is because they do not feel competent to hold them. The true reason probably

lies in the fact that though they have plenty of interesting points to bring forward they have had no practice in expressing their ideas in public. It frequently occurs that a man of few words after a little practice is able to conduct far more instructive conferences than a voluble speaker. In the first case the officers will at least have a chance of stating their own views, and in the other they may not. The naturally taciturn individual when he does open his lips usually speaks to the point and is more worth listening to than the fluent orator. At the same time it is undesirable when from self-consciousness or other cause the assistant director creates a painful feeling akin to compassion amongst his audience. The best way to overcome any difficulties of this nature is to run through the notes before the conference, say what we have got to say, and nothing more. Any padding is out of place.

For example, we will suppose that an officer has prepared a scheme for the attack of a position and the assistant director has made the following notes on his work: The arrangements made for the frontal attack were good, because no more troops were employed than were absolutely necessary, the importance of capturing certain tactical points in front of the enemy's position was clearly indicated, and arrangements were made to bring superiority of artillery and infantry fire against those points. Part of the cavalry were quite rightly sent to guard the east flank of the attack, because a hostile counter-stroke on that side either by infantry or cavalry, though unlikely, might have seriously affected the battle administration of the attack. It is doubtful, however, whether one squadron would not have been sufficient, especially if it had been used for distant patrolling to give early warning of any danger, and thus afford time for the local reserve on that flank to move up and meet it. Every cavalry soldier was required on the west flank, where the main attack was to be delivered

and where the enemy's cavalry appeared to be in some force.

It was quite right to make the main attack against the west flank of the position. There appeared to be no serious obstacles to break up the organisation of the attack, and at the same time the undulations of the ground and the small tactical points gave cover for the advancing troops and afforded effective rallying-points. The outer flank of this flank attack could be well guarded by the cavalry, as the ground was suitable for the action of that arm, as stated in the report.

There was, however, a dangerous gap left unguarded between the inner flank of the main attack and the frontal attack, and it is possible that a hostile counter-stroke could have been delivered with success either against the inner flank of the main attack or the west flank of the frontal attack. The orders issued to the cavalry and the scheme of artillery co-operation in the attack were excellent. The cavalry were first required to cover the front of the main attack until the troops got into the required position, and were then drawn off to the west flank. Possibly it would be difficult in war to carry out this last manœuvre, but perhaps a cavalry officer will give us his opinion on that point later. The artillery were so arranged that a heavy fire could be opened on the front of the enemy's position, still retaining power of movement to closely support the main attack during its final stages. Above all a cross-fire of artillery against the enemy's flank, where the main attack was to be delivered, was most skilfully arranged.

Of course these notes are purely fictitious, and would not usually be prepared verbatim, but somewhat in the following form :

Frontal attack good. Sufficient troops and no more. Capture of tactical points, and arrangement for artillery and infantry superiority against them. Cavalry. East

flank guarded, good, especially in case of counter-stroke, but perhaps too strong. Cavalry urgently required on west, outer flank of main attack. Main attack. Right to select western flank, suitable ground, undulating for cover, and small tactical points for rallying. Outer flank could be guarded by cavalry where ground was favourable. Dangerous gap between frontal and main attack, liable to counter-stroke. Orders to cavalry good, covered preliminaries of main attack and then drew to a flank. Orders to artillery excellent. Heavy fire to support frontal attack, power of movement, cross-fire on main attack.

It is a great advantage to work from notes like the above, because then the director must "speak" his remarks and not read them. Those who have watched an audience listening to a discourse which is being read will have observed how every one immediately sits up and begins to listen when the dull monotony of the best reader is changed even to the halting sentences of the worst speaker.

There is no object in rushing through the notes; there can be a sufficient pause between each subject to enable the assistant director to read his next note and frame the next sentence. These pauses are an advantage, because it enables the slow-thinking mind, as well as the more ephemeral intellect of the keen-witted, to take in what has just been said. For example, when the instructor has dealt with "sufficient troops and no more," he can stop and look for his next note, "capture of tactical points, &c.," and so on throughout the conference.

The inflexion of the voice and the manner of expressing our views are matters worth attention. A dull, monotonous tone has a soporific effect on the audience, and the remarks carry little weight. Everything that is said should bear a tone of conviction, as though the speaker had no doubt about the truth of it. A hesitating and apologetic manner of imparting instruction is never very

effective. A tone implying that "the book says you ought to do this, but it is difficult to agree with it," should also be avoided. It is all very well at the Staff College or during big Staff Rides to discuss and perhaps even disparage what is said in the books, but to many officers these books of training are, or should be, their sheet anchor; and if we minimise their value we not only strike at the foundation of their knowledge, but we also lay ourselves open to the accusation that we know better than the book, and it is more than doubtful if that is the case with any of us. After each little point an inquiring glance can be thrown at the author of the work, in case he wishes to say anything, but if an officer has proved to be very loquacious it is best not to offer this opening. If, on the other hand, the officers cannot be got to express their views, then they should be asked some question which requires an answer. For example, "Why did you send two squadrons to the eastern flank of the attack?"—this of course being said before the director has made any remarks on the subject. The officer will not know whether the director thinks he was right or wrong to do so, consequently he will be able to give an unbiassed opinion. An hour, or an hour and ten minutes, is quite long enough for a conference to last. A conference differs somewhat from a lecture, in that the officers have a chance of putting in a word here and there. This relieves the monotony and makes the time pass more quickly.

It is very important that no officer is held up to ridicule during the conference. It serves no good purpose, though on occasions there is a great temptation to do it, especially when dealing with the "firebrand" previously referred to. It raises a more or less personal dispute between the assistant director and the officer concerned, which can only disturb the harmony of the meeting. It is also undesirable to sharpen one's wits at the expense of the officer

when criticising his work. Some assistant directors may be very quick at seeing the ludicrous side of an argument or statement, but officers who have been working hard and doing their best do not like to be laughed at. This type of criticism usually reacts on the instructor himself, because his comments lose weight, and the sympathy between himself and the officers, which is a valuable asset of instruction, is greatly diminished.

At the end of the conference the assistant director should remain in the room for half an hour or so, because sometimes the conference proper begins at this stage of the proceedings. Officers who would not express their views in front of the other officers will come up and give possibly excellent reasons why they adopted some course of action which has been criticised. An instructive discussion will follow: other officers, released from the restraint of the formal conference, will take sides in the argument, and the assistant director as well as the officers themselves will learn a good deal. If he is not good at it already, the assistant director will learn how to sustain an argument, but above all he will learn how to hold a conference in the future.

Conferences on the ground during a tactical exercise are perhaps more difficult to conduct than a conference in the evening. During the former the assistant director does not know what surprises in the way of military conundrums are going to be sprung upon him, whereas during the latter the whole situation has been carefully studied; the assistant director has learnt a good deal from the various views expressed in their work by the different officers, and he is consequently fortified with numerous arguments. In fact, when dealing with such work as the appreciation of a situation the assistant director, after he has read all the officers' papers, would be well up in the subject so far

as argument was concerned, even if he had no idea how to write an appreciation himself.

The method of conducting a conference on the ground is indicated in Chapter XVIII. Briefly speaking, the assistant director, after issuing a situation should carefully examine the ground and consider the various courses of action which can be adopted. If it is an attack, would it be better to throw the greatest force against the centre, left, or right of the position occupied by the enemy? Each should be compared with the other, and reasons should be forthcoming to show why it would be better to adopt one course in preference to another. If it is the defence of a position which is being studied, and no situations are issued, the director can deal with the matter by discussing each possible solution. Shall we put the infantry behind this bank; is there a good field of fire; can they be enfiladed; are they unduly exposed to hostile artillery fire; can they be reinforced and supplied with ammunition; do they mask the artillery fire of the defence? The artillery and cavalry can be dealt with in a similar manner. By this means the various alternatives can be studied; officers can be asked to give their views; and finally the director can state what he considers would be the best solution of the problem, and give his reasons.

CHAPTER XIV

GENERAL NOTES ON THE WORK DONE BY OFFICERS DURING A STAFF RIDE

A.—A Study of How to Write an Appreciation of a Situation.

All command and staff work in the field should be prepared, written, and arranged so that it can be easily absorbed. The true test of excellence does not lie in the comprehensive nature of the work, clearness of writing, and accuracy of detail, though all these are important, but in the simple question: Can any one, who has to read and act on the work, rapidly and clearly understand what is put down? Before a campaign commences, the most exhaustive treatises may be prepared, and can be assimilated, because there is plenty of time available for their study; but when operations once commence, every one's time is fully employed, and it should be the object of every military official to speak and write what is to the point and nothing else. Furthermore, it should be spoken and written so that no false interpretation can be placed on the words either by an extremely clever or extremely stupid individual. A commander or a staff officer who is able to express in a few words, orally or in writing, exactly what he wishes to convey and nothing else, possesses a very valuable military asset.

A staff officer who is called upon to execute any staff work in war should endeavour to put himself in the

position of the officer who is to act on the result of his labours. Sometimes the staff officer is told to ascertain how a thing is to be done, and sometimes to do it himself. He will find the latter task by far the easier of the two, and yet if in the first case he had imagined that he was to do it himself, his work in all probability would be greatly improved in value. He should ask himself the question, "What should I do if I were attacking this position, improving this railway station, or arranging this transport, &c.?" Then again, "What should I want to know if I was unable to come myself and had to send a staff officer?" Satisfactory replies to these questions will invariably lead to good work.

When required to conduct a reconnaissance of ground, either of a large area or of a definite locality for some particular purpose, he should first study the available map. He should get every possible item of information which bears on his task from this map, and make a note of each. He should then arrange the details of his reconnaissance from the map, so that he will commence to work on the ground at the most suitable spot, and will not be compelled to go over the same piece of ground twice.

After a little practice, an officer will find that the map will tell him a good deal, but it will not tell him everything. The map usually gives the situation of hills, rivers, villages, towns, &c., but it does not give much information regarding the nature of the ground, the crops, the view &c. Officers engaged on reconnaissance work frequently go over the ground first and study the map for further information afterwards. They should reverse this order of things, because if they first obtain all the information the map can give them, they start on their reconnaissance with a good deal of knowledge, and know exactly where to go and what to look for in order to complete their report.

It is possible to deal but briefly with the various types

of work that an officer is called upon to perform during a Staff Ride, but a general idea of what is required can be suggested which may assist officers to elaborate the details themselves. The work can be divided up under the following headings, and each will be treated separately:

A.—Appreciations of a situation, strategical, tactical, or administrative (*vide* below).

B.—Orders and instructions (Chapter XV.).

C.—Reports of all kinds, especially reconnaissance reports under the sub-headings: (1) Security; (2) Attack; (3) Defence; (4) Administration (Chapter XVI.).

D.—Sketches (Chapter XVI.).

E.—Diagrams, graphics, time-tables, &c. (Chapter XVI.).

A. *Appreciations of a Situation.*

The study of a strategical, tactical, or administrative problem is not only highly instructive, but, if some system of approaching the subject can be laid down, it is very interesting. The chief drawback is the somewhat alarming title. We are asked to "appreciate" or "set a value on" a certain "situation," which means in ordinary language that we have got to solve a definite military problem. Those of us who in our early days have endeavoured to get even with our more gifted linguistic comrades have studied the art of solving triangles. Some of us learnt a lot of formulas by heart, and were prepared to deal with any proposition which an examiner could produce. Others went a step farther and discovered how to construct the necessary formula. It is said that every military problem requires different treatment, and that if we attempt to lay down rules for its solution we shall soon discover that the task is beyond our powers. But in our schooldays the triangles were always different: there was one which closely resembled a military problem; one of its sides had a sort of hinge, and there were two solutions to that triangle.

Endeavours will be made below to construct formulas to work out these military problems, and the solution will depend on the various details of information, physical features, strategical, tactical, and administrative principles, &c., which we can call the sides and angles of our triangle.

It is not so difficult to write an appreciation of a situation as some people imagine, if only one knows the right way to set to work. It is merely putting down on paper what passes through our minds when we are studying a situation and endeavouring to arrive at a decision as to what it is best to do. We will take a simple tactical example, and we shall find that the formula we can construct whilst we are working out this problem will be useful to us in dealing with any other military situation, from a question whether it would be better to send forward a section or half a company to the future strategy involved in an attack by Mars against the Allied Powers of the Earth and Venus. Whilst working out the problem attention will be called to each statement which we can use as a formula by letters in brackets; these will be recapitulated in a summary at the end.

The Situation.

See Sketch No. 20.

1. You are in command of four companies of infantry, which, with a squadron of cavalry, form the vanguard of an advanced guard to a division marching east. The remainder of the advanced guard is a mile in rear, and the main guard is three miles ahead of the main body.

2. It is not anticipated that any hostile troops will be met during the march, except perhaps a few patrols, but in the orders you received on starting you were told that if any small parties of the enemy were met they were to be driven back vigorously.

3. The division is on the right of several divisions

marching eastwards, the cavalry are towards the left front of the army, and the enemy's main army is believed to be three or four days' march distant. So far the enemy has had the worst of the campaign.

4. During the last hour the squadron commander has reported that he has been meeting and driving back hostile patrols.

5. On arriving about a mile west of E you hear some firing in front, and shortly afterwards a message comes from the squadron commander at E to say that A and B are held by hostile troops, that he has attacked B round the north side of wood F with half a squadron, but was repulsed, losing five men. He is now holding the knolls at C and D with one troop on each; the remainder of his squadron is at E, with a patrol at wood G. His patrols, three miles to the north, are in touch with patrols from the divisions on the left, and his patrols two miles to the south report no enemy in sight. He also adds that the enemy has not attempted to advance out of his position.

On receipt of this information we should immediately proceed, as rapidly as possible, to E, and, as the ground west of E is hidden from the enemy, we should tell the vanguard to follow as far as the western slopes of E.

Now let us try to put down on paper what passes through our mind as we go forward to E. We think first of the strength and position of our own forces (*a*). We know that we have only four companies of infantry, but that a squadron is also present to help us. We also know that the vanguard is about a mile ahead of the main guard, so if we halt at E reinforcements will begin to arrive in about twenty minutes.

Then we think of the position of the enemy's forces and his probable strength (*b*). We are somewhat surprised

that the cavalry has been stopped, because we did not anticipate any resistance during the march. We think he cannot be very strong, otherwise we should have met his cavalry, his advanced guard, or his outposts before this, so it is probable that we have now encountered some of his advanced troops.

Then we remember what is our own object (*c*). The orders told us to drive back the enemy's advanced troops, so presumably we must attack if such an operation appears feasible, in order that the march of the main body shall not be interfered with. By this time we arrive at E, and it is necessary for us to consider the various factors which may affect the attainment of our object (*d*).

The first factor to consider is whether we are strong enough to carry out our object, which is to attack; this brings us to a study of the relative numbers, and in case of savage warfare the armament of ourselves and the enemy (*e*).

The enemy is holding the high ground about A and B in sufficient strength to repel the attack of half a squadron, though that attack was delivered against their flank, so it is evident that he has more than a few patrols on this high ground; but he is only holding two small hills, and does not appear to have any troops between them, because our patrol has reached the wood G.

We then wonder what is the enemy's object (*f*). So far we have met a few hostile patrols only; these would belong to some formed body of mounted troops, and it is probable that we have now encountered this formed body. Its object may be of an offensive or defensive nature. It is evidently not offensive, or our squadron would have been attacked before this. If it is defensive, it is probably either to find out what troops we have got marching along this road, or to delay our advance till hostile reinforcements arrive, or perhaps to cover some important point to the east. These objects can best be defeated by an immediate

attack, so it is advisable to act at once without waiting for the remainder of the advanced guard to come up.

The next point we should consider would be how is this attack to be delivered, and we find that it is necessary to study the physical features of the ground (*g*) and the enemy's vulnerable points (*h*). To arrive at sound conclusions on these matters it is advisable to put ourselves in the position of the enemy (*h*).

From hill B he has a clear field of fire to the front and both flanks. If we attack this hill we must traverse about 900 yards of perfectly open ground, whether we advance against it from the west, north-west, or south-west. Furthermore, a successful attack on hill B will not necessarily compel the enemy to retire from hill A, because the latter commands the former, and as B is 1500 yards from A, the enemy's line of retreat from A would still be secure. It would be necessary, therefore, after capturing B, to make another attack on A, across the stream, unless we decide to attack both A and B simultaneously, which with only four companies appears to be a dangerous thing to do.

We then consider an attack on hill A. If we were in the enemy's position it is fairly certain that we should prefer to be attacked on hill B rather than on hill A, because if the enemy is driven off hill A he will be uneasy about his line of retreat from B. He knows probably that we have other troops to the north of us, and therefore if he is driven back he would prefer to retire in a south-easterly rather than a north-easterly direction.

We should also observe that though, owing to the swamp, it would be difficult to attack A from the south, there is a covered approach from E towards A, first behind hill D, then behind the spur running south towards wood G and then through wood G. Then again there is a spur running north-west from hill A which it will not be very easy to defend.

The enemy's vulnerable point appears, therefore, to be the spur north-west of A, and a study of such points usually indicates the sound course for us to adopt (*h*).

We must now prepare a definite plan of action, and decide which is the best manner of carrying out an attack on hill A (*j*). We can advance through the wood G, from the hill C, or from the wood H. The last two appear to be undesirable. The advance from C would be over very open ground, and that from H would be hampered by the stream and boggy ground between A and H. One disadvantage of the first idea is that it may be difficult to initiate an attack from the south-east edge of the wood G, but as we have only a small force, this difficulty is not very great. Another disadvantage is that while we are attacking A from the wood G, hostile artillery fire from the high ground north-east of hill B may suddenly enfilade our troops at a range of 2000 yards. It is extremely unlikely, however, that any hostile artillery is close at hand, and this is a risk which we must be prepared to accept (*n*).

We should now consider how the troops can be protected from counter-stroke during the attack, and how we can obtain sufficient warning of any unexpected event (*l*). We do not want to detach more troops than are absolutely necessary, because every man that is sent away causes a reduction in strength at the vital point, and may result in a neglect of the first principle of war—the concentration of superior force at the decisive point (*m*).

With a troop of cavalry holding D and another holding C, it should be fairly safe to move the remainder of the force into the wood G. We wish to surprise the enemy (*o*), or at least not to disclose the direction of our main attack till the last moment, so we might, as we pass, detach half a company to reinforce hill D; it is close to our line of advance, so the men will not have far to go. This

detachment may mislead the enemy (*o*), it may make him think our main attack is coming from D towards B, and may even induce him to reinforce B. It would also secure our retreat on E if anything goes wrong, especially considering that a counter-stroke is more likely to come from the north of B than from the south of A, owing to the swampy ground near the latter. We should then consider whether it was desirable to make another detachment to reinforce the troop of cavalry at C, with the object of obtaining covering fire to assist our main attack. The distance from C to A is some 1200 yards, which is rather long for effective rifle-fire; the detachment would weaken our main attack and introduce complications (*p*) and a dispersion of troops which is undesirable.

Finally, if the squadron is under our command, we must decide how they can best assist us. It is desirable to retain possession of hills C and D, not only to secure our own retreat, but also to cover the front of the remainder of the advanced guard. One troop on each should be sufficient, and the remainder might follow the attack to wood G, so that directly A is carried they can ride forward, followed by the two troops at C and D.

Having made these notes, we can now write the appreciation of the situation, which might be as follows:

Appreciation of the Situation.

Hill E, 2 P.M., June 12.

1. The vanguard, consisting of four companies and a squadron, is one mile ahead of the main guard, so reinforcements may be expected to arrive at E in about twenty minutes.

2. The enemy is holding the high ground about A and B in sufficient strength to repel the attack of half a squadron, though that attack was delivered against his

flank. He has evidently more than a few patrols on this high ground, but he is not advancing; he is not holding the ground between A and B, and hitherto we have encountered no formed bodies of his troops. It is probable, therefore, that he is not strong enough to resist a concentrated attack on one point delivered by four companies.

3. As the enemy has made no forward movement and has adopted a defensive attitude, his object may be either to discover what troops are moving along this road, or to maintain his position till reinforcements arrive, or to cover some important point to the east.

4. Our orders are to drive back the enemy's advanced troops if met. Considering all these points, an immediate attack by the vanguard appears to be both feasible and desirable.

5. A study of the ground shows that from B the enemy has a clear field of fire in every direction for some 800 yards. It would also be easy for him to defend A against any attack from the west or south-west, especially considering the swampy ground to the south-west of A. It would be difficult, however, for him to defend A against an attack delivered from the wood G towards the spur running north-west from A.

6. A successful attack against B would not be so decisive as against A, because if B were carried the enemy could still defend A. His line of retreat would be secure, and he would prefer to be driven in a south-easterly rather than a north-easterly direction, and thus avoid our divisions, which are marching east along parallel roads to the north of us.

7. There is a concealed line of approach for our attack from E, over the neck west of D and then down to the wood G. From the south-east edge of this wood an attack can be made against the weak spur mentioned in

paragraph 5. The enemy so far has not shown any artillery, and it is unlikely that he has any with what appears to be such a small force. If, however, guns opened fire suddenly from the hill north-east of D they would enfilade our attack. This is a danger which we must accept.

8. It is evident, therefore, that our best line of attack is from the wood G up the spur to A. It is important to use every man we can spare for this attack, and with one troop of cavalry on C and another on D it is safe to move the whole of the infantry to wood G. At the same time a reinforcement with infantry on D might mislead the enemy as to the direction of our attack, and it would secure our retirement on E if anything went wrong, especially considering that a counter-stroke is more likely to come from the north of B than from the south of A, owing to the swampy ground near the latter. An infantry detachment can be sent to D without making a long or dangerous march, and will be close at hand if required.

9. It appears to be undesirable to complicate our plan and weaken our main attack by detaching troops to C. The range from that hill to A is some 1200 yards, and therefore rifle-fire would not be very effective to support the main attack.

10. The cavalry now on C and D should remain there, continue to fire on the enemy, and distract his attention from his centre. The remainder of the squadron can proceed with the infantry to the wood G, where they would be ready to pursue the enemy and gain ground to the front directly A is carried by the infantry.

11. The plan suggested is to retain the cavalry now on C and D, move the four companies, followed by the remainder of the cavalry, over the ground hidden from the enemy, by the neck between E and D, detach half a com-

pany to D to open a heavy fire on B, move the remainder of the infantry and the cavalry, still under cover, behind the spur south of D to the wood G, and then attack the spur at A from the south-east edge of the wood G. The scouts at present on the flanks will remain out to give warning of any hostile approach.

It is not to be supposed that the officer commanding this vanguard would write out an appreciation in this manner in real war, but all the ideas expressed in the above would pass rapidly through his mind if he were a good commander; and it is excellent practice in peace-time to work out these schemes "by numbers" and record our ideas on paper. It accustoms the eye to seize rapidly on the tactical or strategical features of the country, and trains the mind to approach the solution of these problems in a logical and common-sense manner. It teaches us to remember and to apply the important principles of war, and to consider the various factors which must affect the successful achievement of any military enterprise.

The letters (*a*), (*b*), &c., which head the following notes are referred to in the previous study of the situation. A few extra paragraphs, dealing with strategical problems, are added so as to make the list more complete, but special points not included here will frequently arise, and must be dealt with in the appreciation.

Notes for the Guidance of Officers when Writing an Appreciation of a Strategical or Tactical Situation.

An appreciation of a situation is a statement, arranged in logical sequence, of what passes through the mind of an officer whenever he is called upon to solve a military problem.

A strategical or tactical appreciation can be prepared, as a rule, on the following lines, though the order in which the various paragraphs are given must sometimes be changed, or some headings may be omitted and others added, to meet special requirements:

(*a*) The strength and position of our own forces. When these are well known it is only necessary to refer to them in order to strengthen an argument or for the purposes of (*e*). When the situation of the troops is complicated, or when there is doubt about the arrival of expected reinforcements, &c., it is necessary to state them clearly but briefly.

(*b*) The strength and position of the enemy's forces, so far as they are known. These, together with the object and *moral* of the enemy, must be deduced from studying the situation, the ground, and what has happened before. Certainties cannot be expected, and we must rely frequently on probabilities.

(*c*) The object we have in view. This should be kept in evidence throughout the appreciation.

(*d*) The elements of the situation which may affect the attainment of our object either for good or ill. These are summarised under headings (*e*) to (*h*).

(*e*) The relative numbers, *moral*, and armament of the opposing forces, *vide* notes to (*a*) and (*b*) above.

(*f*) The probable object of the enemy. *Vide* note to (*b*) above. The object of the enemy should be studied purely from the point of view of gaining our own object, and not merely preventing him from gaining his. If we fall into this error we are apt to do little, to lose the initiative, and not only fail to gain our own object, but also fail to prevent the enemy from gaining his.

(*g*) The physical features of the ground, also the roads, railways, canals, &c. How they can be turned to our own advantage and to the disadvantage of the enemy.

A careful study of the theatre of war, or of the immediate area of operations, is one of the most important parts of an appreciation, and one most frequently neglected.

(*h*) The enemy's vulnerable points. These are disclosed partly by the situation, such as the direction of the lines of communication or retreat, partly by a study of the ground, *vide* (*g*), and partly by endeavouring to put ourselves, in imagination, in the position of the enemy. If we can discover the enemy's vulnerable point, we usually gain the key to our own course of action.

(*i*) Other elements chiefly of a strategical nature are: Politics, finance, communications, supply and transport, calculations of time and space, character of the opposing commanders, the enemy's methods of fighting, and climatic conditions.

(*j*) A definite proposal for action. This involves a consideration of the various courses open to ourselves, and how these may be affected by any action the enemy may take. The plan suggested must be practical and not merely a vague scheme. The movements of the troops, the lines of march, and the exact object they are aiming at must be clearly indicated. The practicability of the plan must be proved, if necessary, by entering into questions of supply, transport, railways, &c. The plan must be suitable to the situation. If we are fighting in Wales, and are endeavouring to defeat an enemy in front of us, it is useless to suggest an attack on London by sending a division round by sea.

(*k*) The elaboration of the plan. The following notes (*l* to *q*) may be useful:

(*l*) The security of the main operation and the advent of the unexpected should be provided for. Sometimes during peace operations officers suggest wide turning

movements with small detachments which violate every principle of war, and if opposed by an energetic commander can only lead to disaster. Night attacks by large bodies of cavalry, a movement to a flank between the enemy's position and a formidable obstacle, with no means of crossing it, and other operations of a similar nature, have frequently been suggested during Staff Rides. Historical examples can no doubt be found in support of such manœuvres, but it is better to discourage them, and deal with less heroic plans which do not require a Wellington, Napoleon, or a Lee to carry them out.

(*m*) Concentration of superior force at the decisive point is a principle of war which can never be neglected. Every detachment reduces the weight of the blow at the vital point, where success is to be gained or lost. Unnecessary dispersion of troops means weakness everywhere, and against a vigorous enemy is certain to lead to defeat. The truth of this is written large over every page of history.

(*n*) We cannot be safe everywhere, so we must be prepared to accept some risk if we are aiming at decisive success.

(*o*) Surprise is one of the most powerful weapons of war. It means that one side is delivering a blow before the other is prepared to receive it. We should endeavour at all times to mystify and mislead our opponent.

(*p*) A simple plan is less dangerous, more effective, and far easier to carry out, with less risk of failure, than one which is complicated, even though it may be ingenious.

(*q*) As a rule one line of operations in strategy is safer and more effective than two or three. Owing, however, to absence of roads and the size of armies, it is frequently impossible to carry out this principle.

The above notes should be used merely as a general guide. Every appreciation must be dealt with in a different manner according to the object in view, and it is

most desirable that this object should not be obscured by a mass of detail.

If it is necessary to prove any statement or any suggestion by long descriptions of what transport there is available, or by working out elaborate movements by rail, these tables should be placed in an appendix, and not in the body of the appreciation.

There are two distinct types of an appreciation, one prepared in peace-time or on the declaration of war, and the other after the campaign has commenced. The first of these must necessarily be a lengthy document; the factors or elements which may affect the attainment of the object are partly unknown or very uncertain. It is necessary to consider so many possibilities that it is usual to write several appreciations, each based on one situation out of the number that can probably arise.

It will be apparent, therefore, that if the scheme for a Staff Ride deals with the opening of a campaign, the appreciations which must be written by the officers must be very lengthy, although the officers will not be given a quarter of the information in the scheme which they would possess in real war. Neither side has yet invaded the territory of the other; it is not always apparent whether one side will invade and the other defend; or whether, whilst preparing to invade, the deployment of one side may not be interfered with by the action of the other. The possible lines of invasion of each force must be considered, together with the action to be taken if both invade on the same line, if one invades on one line and the other on another, or if one side invades on one line and the enemy has concentrated to defend that line or has assembled elsewhere. The number of possibilities is legion; each has to be considered, and finally the best course to adopt must be decided upon. This decision cannot be reached without the most careful study of the physical features of the

theatre of war, the railways or transports available to carry the army to the area selected, the safety of this movement, the system of supply, and the defence of vital interests elsewhere. The study of the theatre of war alone will occupy many pages of printed matter. The commander must know beforehand whether the mountains, the rivers, and the forests will be an advantage to himself and a disadvantage to the enemy, or *vice versâ*. The movement of the troops by rail or sea will require the most exhaustive study before it can be proved satisfactorily that the suggested course of action is feasible. The supply of the army after deployment will necessitate equally careful consideration. It will be seen, therefore, that an appreciation dealing with a situation at the commencement of a campaign will be so lengthy, and involve such high questions of politics, finance, and administration, that it is hardly suitable for the ordinary Staff Ride.

The difficulty can be overcome to some extent by tying down one side to an invasion on a certain line and making it clear to both sides that the enemy, for some political or other reason, is compelled to act on the defensive. Even then the appreciation must necessarily be lengthy, and one which few staff officers would ever be called upon to prepare in war.

A study of von Moltke's projects for the invasion of Bohemia in 1866 will show how necessary it is to include all the points mentioned above in any appreciation of this nature.

Directly hostilities have commenced the area of possible operations is at once reduced; the situation deals with definite points, and the courses open to each belligerent are rarely numerous. Lines of communication already exist, the strategical deployment is a thing of the past, and everything is working as smoothly as the arrangements of the commanders and the circumstances of the case will

permit. These appreciations fall within the compass of every commander and staff officer in war, and can be practised in peace exercises with great advantage.

Strategy, tactics, and administration will each in turn be the dominant factor of the problem. In open country, if supply offers no great difficulties, and if the ground does not favour the tactics of one side more than the other, strategy will be the main consideration. In other circumstances, though strategy might indicate a certain line of action, the tactical difficulties might be so great that they would become the ruling factor. Then again, though tactics and strategy might point to a suitable plan of action, the questions of administration will perhaps render such a solution absolutely out of the question. Whichever of these three factors is the dominant feature of the situation, it should be clearly brought out in the appreciation. We have already seen that the plan suggested must be practical; it is useless to minimise difficulties during a Staff Ride and bring forward proposals which, though apparently very brilliant, will not bear the light of strategical, tactical, or administrative inspection.

CHAPTER XV

NOTES ON THE WORK DONE BY OFFICERS DURING A STAFF RIDE (*continued*)

B.—Orders and Instructions.

The method of writing orders is clearly indicated in Combined Training; it is unnecessary, therefore, to do more than point out a few difficulties or mistakes in their preparation which are frequently observed.

Combined Training lays down that orders issued by one commander are intended for the commanders beneath him and for no one else. Many officers have a vague idea that the orders so issued are intended to be read out to the troops, and that is the reason why they must be prepared with such great care and exactitude.

An order, as portrayed in Combined Training, is nothing more than a memorandum written by a commander to his subordinates. If the various matters are arranged in the sequence laid down, it is easier for the subordinate commanders to understand the order, and readily refer to it later, than it would be if there was no such system. As all operation orders are of a similar nature, a general system of preparing them can be, and is, laid down for the *guidance* of officers. But because this system is laid down in Combined Training there is no occasion for officers to follow it blindly, and insert something under every heading merely because the heading is given, and not to put in other matters, which may be of great importance at the moment,

simply because there appears to be no heading under which they fall.

If any of us are asked to write a memorandum containing the orders we wish to convey to a subordinate we should have no difficulty in doing so, but the memorandum written straight out of our heads might contain some ambiguities or omissions, whereas if we cudgel our brains to put it into the form laid down in Combined Training we are less likely to commit these errors. There is no doubt that it is much easier to write a memorandum containing our wishes than it is to write orders, but the latter are the best for military purposes. In a memorandum we are liable to stray from the point, to suggest how a thing should be done, to qualify our instructions with vague statements such as "at daybreak," "if possible," &c., and to explain our reasons for wishing certain things to be done.

These are all prohibited in Combined Training, because they are pitfalls which, if not avoided, may wreck the plan of operations. At the same time they are difficult to avoid, and whilst endeavouring to do so we are led into statements that we do not quite mean. For example, we wish a subordinate to attack some hostile troops in front of him, which we believe are inferior in strength to the force we propose to employ, but we have no evidence to prove it. If we wrote a memorandum we should say, "You are required to attack the troops in front of you, and, if possible, drive them back. If, however, you find that the enemy is in much greater strength than our information, which is not very reliable, leads us to believe, you must be prepared to assume a defensive attitude."

Now let us try and put this into the proper form of orders, and we are at once confronted with a difficulty. The commander has a firm conviction in his own mind that "the enemy in front" is not as strong as the troops he is

sending to attack them, or he would not order the attack, yet it is difficult to put this down in an order. This very difficulty at once shows that we are ordering an officer to do a thing which we cannot describe in a plain, straightforward manner.

Then again we have to give the general situation; probably the commander on the spot knows more about it than we do. We have to give the information regarding the enemy: the local commander may be better advised on this subject than ourselves. The idea of attacking at all may have been born in our minds by the information we have received from this commander, added to other information which we have obtained and which he is unaware of. It appears that this last-mentioned point, together with the general situation, will assist us in preparing the first order, and give us at least a commencement.

1. The enemy is making a heavy attack against the western part of our position, so it is probable that he is in no great strength in front of your brigade.

2. The major-general commanding intends to hold the enemy on the west and attack on the east. As, however, the hostile attack on the west may be a feint, he wishes to be prepared to adopt a defensive attitude on the east flank if necessary.

3. Your brigade will attack the troops in front of you as soon as possible, but if the enemy appears to be in great strength you must be ready to act on the defensive.

These orders are probably as indifferent as they can be, and yet it is difficult to suggest anything better. It was easy enough to write the memorandum, but it is quite a different thing to put the memorandum into the form of orders.

The whole point of the matter is that the original idea of the commander was wrong. If he had written a memorandum he might not have discovered the mistake, and

might have thought little more about it except that he had given his subordinate rather a delicate task to carry out.

Any such memorandum, or any such orders, sent to a subordinate simply means that the officer who sends them is transferring responsibility which should rest with him on to the shoulders of his subordinate.

Is the brigade to attack or is it to defend? It cannot do both, and we have discovered the reason why, not by writing a memorandum, but by endeavouring to put that memorandum into the form of orders. That is the reason why Combined Training recommends this formal method of writing orders, and lays an embargo on all doubtful terms. The superior commander is the person to decide whether any of his troops are to attack, defend, advance, or retire, &c. If he thinks there is any doubt about the possibility of any operation, he will keep the uncertainty to himself, otherwise he will seriously affect the enterprise and dash of his subordinate.

Let us consider what is called a "holding attack," which closely resembles the above. The divisional commander is told to make a holding attack. He tells the brigade commander to make a holding attack, who passes on the same order to the battalion commanders. The battalion commanders will naturally halt their companies as soon as any opposition is met with. The enemy, seeing that a holding attack is being made, will withdraw his reserves to a point where they can be more usefully employed, and will contain the holding attack with a smaller force. The main attack will probably fail in consequence, and the divisional, brigade, and battalion commanders will be abused for not being more energetic or for not going far enough. A few weeks later another holding attack is to be made. This time it is pushed with great vigour, the attacking troops get into difficulties with a greatly superior force, and

reserves are required to go to their assistance. The divisional, brigade, and battalion commanders are then abused for going too far.

Here again undue responsibility has been handed down from one commander to another. When the divisional commander first received the order to make a holding attack, he should have reconnoitred the ground and decided how far it was necessary for one or two of his brigades to go. He would then issue orders directing his troops to attack, capture, and hold a certain line. Having gained this line, he would again reconnoitre, and decide whether a further attack was necessary, and if so issue orders accordingly. None of the brigadiers or the battalion commanders would have been told that they were making a holding attack, because there would have been no occasion to tell them, and far more satisfactory results might be anticipated by leaving them in ignorance of the matter.

We see, therefore, the result of any failure to comply with the principles of Combined Training in this matter, and how important it is in orders to tell subordinates to do this or that without giving reasons or qualifying the directness of the order.

There appears to be no reason why the intentions of the commander should not be lengthy, or even hinge on the action of another commander, if the situation requires it, especially when a somewhat complicated retreat will probably take place. In this case a commander can issue what might be called preparatory operation orders explaining the general scheme of operations which are not to be acted on until further orders are received or until some action of the enemy compels it.

For example, one force might be falling back before another, either to gain a better fighting position or to call up reinforcements. A brigadier in front line might issue

orders of the following nature to his battalion commanders:

The present position will be held until the division on our left has retired. The brigade will then draw off by successive battalions from the left. The reserve battalion will occupy the hill R (in rear of the line of defence and on the left flank) till the rest of the brigade has retired. The reserve battalion will by its fire assist the retirement of the division on the left, which may be heavily pressed during its passage over the bridges at S. The left battalion may be required to assist the reserve battalion in the above operation. In any case, the hill R will be held till the last.

The reserve and the left battalions will retire over the bridge at Y, the remainder of the brigade using the crossings at X. Commanding officers will reconnoitre their various lines of retreat, and the officer commanding the left battalion will send an officer to hill R to discover how his battalion can best assist if required.

The brigadier will give the order for retirement of each battalion of the brigade from its present position. He will remain with the left battalion till it retires, and then join the reserve on hill R.

This is a very lengthy order, but it is most desirable that in a complicated situation of this nature every subordinate commander should know what to do beforehand.

Another difficulty in writing orders is connected with the "intentions" of the commander. Combined Training directs that the orders of a superior commander should not be passed on to the smaller units, but that fresh orders should be prepared by each command. This is necessary for several reasons. The commander of two or three divisions may make statements in his orders regarding his own intentions which are highly confidential. For example, he may have decided to make his main attack against the

enemy's eastern flank and to make a "holding" attack against the front of the position. It would be necessary for the divisional commander to know this, but it would be undesirable for the brigadiers, and certainly for the battalion commanders, to know that they were taking part in an operation which they might consider required no great energy.

Then again, if the commander's orders were sown broadcast over the force they might easily fall into the enemy's hands through the capture of an officer with the orders on him, and the intentions of the commander would be known to the enemy. Not only would the operation fail, but the enemy, learning the distribution of the troops, could make a heavy attack on some weakly defended locality, and perhaps win a great battle before the commander had time to change his plans or move his reserves.

If a commander was fighting either an offensive or defensive battle, he might wish to inform those immediately under him what he intended to do if things went wrong and a retreat became necessary. It would be most impolitic to allow any arrangements for retreat to reach the ears of the fighting troops, though it would be quite right to make proper arrangements for it beforehand.

As the commander's orders are not to be passed on, the divisional commander must insert his "intentions" in his own order. He frequently says to himself that these are not my intentions—they are the intentions of the lieut.-general commanding, and he does not quite know what to put in his orders and what to leave out. The natural answer is that he must put in everything which affects his own command, provided no secrets are disclosed and no undesirable statements regarding retreat are included. This, however, does not quite overcome the difficulty. We will suppose that the lieut.-general has stated in his intentions that the force would advance to the river

M and throw advanced guards across it. The divisional commander could hardly state in his intentions that this was to be done, because it would appear that he was ordering it. Or, again, the lieut.-general might state: "It is intended to retain possession of the N position till an attack develops, when the force will retire to the line O, P," &c. The divisional commander must say in his orders that he intends to hold the N position, &c.; it is, however, not his intention, but that of the lieut.-general.

Probably the best manner of overcoming the difficulty is to treat the lieut.-general's orders in an impersonal manner, provided it can be done without disclosing secrets, or to omit them altogether. The enemy's position is to be attacked at all points to-morrow. The 18th division will, &c.

The 18th division will continue to hold the N position to-morrow. In case of a retirement being ordered brigadiers are informed confidentially of the following scheme, &c.:

The force will advance to-morrow, the 18th division gaining the line of the river M and throwing the advanced guard across it. Or the 18th division will be on the right of the advance to-morrow and will gain the river M, throwing the advanced guard across it.

When orders are written in small note-books no attempt should be made to preserve a margin for giving a list of units. If these are badly written it is difficult to ascertain what troops belong to the advanced guard and what to the main body. It is better to write these down in a clear space below each order. Each unit can be written below the other, or in a line, with a good space between. Thus:

The advanced guard will be clear of its bivouac at 6 A.M.; it will be composed of:

One squadron 90th Hussars.

Two battalions of the 40th infantry brigade.

One battery of the 120th field artillery brigade.
The 85th field company R.E.

The whole under the General officer commanding 40th brigade

The head of the remainder of the division will pass the cross roads at V at 7 A.M., and will march in the following order:

Divisional headquarters. Remainder of 40th infantry brigade. Remainder of 120th field artillery brigade. 41st infantry brigade, &c.

If these troops are named in the margin in a small note-book, those forming the advanced guard overlap the order dealing with the main body, and instead of the margin making things clearer, it does the reverse.

It is a mistake to detail by name the units under the command of the officer to whom the orders are addressed; the latter is the proper person to decide which unit should be employed on any particular task; he alone knows the exact situation as regards efficiency, detachments, fatigue, &c., of each unit under his command, and therefore he is the best judge as to which unit to detail for the various operations.

There is, however, a great temptation to detail certain units for a particular task, especially when they are somewhat scattered, and when one unit is particularly well placed to carry out the plan of the higher commander. As a rule the subordinate commander would recognise this fact and detail this particular unit for the work. Occasions arise, however, when it is impolitic to inform the subordinate commander of some later operation which it is intended to execute, and which it is undesirable to notify till the last moment, such as a small night attack or a movement to a flank.

It would be a mistake if the success of the operation was imperilled by adhering too closely to this rule, and, if

necessary, a particular unit might be detailed for a particular task. For example, we will suppose that a brigade is bivouacked in rear of a defile, and that its advanced guard, consisting of one battalion, is defending the defile, and that it is desired to remove the remainder of the brigade very rapidly to a flank. The divisional commander could order the brigadier to retain the battalion in the defile and to move the rest of his brigade as required.

The brigadier, owing to some interior arrangement regarding supply of food, ammunition, or forage, might be particularly anxious to withdraw this battalion and send forward another to replace it. This might take so long that the movement of the brigade would be seriously delayed and the operation fail in consequence. On the other hand, owing to such a complication as is mentioned above the fresh task imposed on the brigadier might be executed with greater promptitude and efficiency by relieving the battalion in the defile.

With a force of the size of the division it would be possible, as a rule, for the divisional commander to be fully informed of the situation, both tactical and administrative, of every brigade in his command; and if he was of opinion that any difficulty was likely to arise, it would be best for him to confer personally with the brigadier, or to break the ordinary rule and actually name a unit in the brigade.

For example, the commander of the force might have decided to make one more attack, and, if that failed, to retire or move elsewhere. The divisional commander might be informed of this intention, but it might be extremely undesirable to inform the brigadiers. The divisional commander would then be unable to explain to the brigadier why certain of his battalions were to do one thing and the remainder do something else, and would be compelled to interfere in the command of the brigade without giving any reason for doing so, simply because he

could not inform the brigadier of the whole circumstances of the situation.

Another difficulty of a similar nature is to name the commander of a detachment, such as an advanced or rear-guard or an outpost line. It is usual in this case to obtain the name of the commander from the brigadier and then insert it in the operation orders.

When part of a brigade, such as two battalions, is detailed for some detached work it is generally advisable to place the brigadier in command, especially if the detachment is composed of all arms. The commanding officer of a battalion has only one staff officer, the adjutant, whereas the brigadier is provided with a sufficient staff for all requirements. In this case the brigadier could be named in the divisional orders as the commander of the detachment.

In any tactical operation, such as an attack or a defence, it is most desirable to state where such units as the ammunition columns both of the artillery brigades and of the division are to be placed, or the routes they are to follow. The actual position or route may be decided upon by the brigadier-general commanding the artillery, but they should be notified in divisional orders so that every one will know where to find them. It is sometimes forgotten that the artillery ammunition columns carry rifle as well as gun ammunition, and that on some occasions it might be necessary to separate these. The same applies to field ambulances, supply columns, and regimental second line transport.

It is important when writing orders during a Staff Ride that the officers should frequently consult the War Establishments, not only because it familiarises them with the composition of the various units making up the army, but because they are apt to overlook important units which require attention. For example, an infantry brigade consists of four battalions only. The headquarters of the

brigade and also each battalion has its own transport for baggage, stores, and supplies. Each battalion has transport for a certain amount of small arm ammunition and for medical equipment; there is also a medical officer, together with a certain number of company bearers. Such units as field ambulances, supply columns, artillery, and engineers belong to the divisional troops, and if some of these or any part of them are to be attached to the infantry brigade, the fact must be stated in orders.

Omissions in orders are very frequent amongst the administrative units. The field ambulances are either forgotten or placed without thought with the second line transport or with the divisional ammunition column. Or all these are referred to as "baggage." Each unit of the command should be mentioned in the orders, otherwise the commander of the unit has to send for orders, perhaps in the middle of the night. It a is good plan, when writing orders, to refer constantly to Combined Training, and make quite sure that the instructions laid down therein are closely followed. An officer who writes an order should endeavour to put himself in the position of the officer who has to act on it, and ascertain if he himself would know exactly what to do if he was called upon to carry it out. If possible the various units composing the force should be placed on the map after the orders have been written, and then checked with the War Establishments. If this is done omissions are unlikely, and a comprehensive plan of operations is disclosed by the orders.

Occasions arise in war when it is not possible to give definite orders to a subordinate. This is the case when cavalry are sent some distance from the main body, or when a detachment of one or all arms is about to be made, or when a detachment has already been made and the subordinate commander is unable to place his superior in immediate possession of all the factors which affect the

situation in his locality. It is then necessary to substitute "instructions" for "orders." Orders convey to the subordinate the general situation, the commander's intentions, and definite statements as to what the subordinate is to do. Instructions contain the general situation, the intentions of the commander, and describe exactly the task which the subordinate is required to execute, but give no details as to what he is to do, because these particulars depend upon the local situation at the moment, which the superior commander is unable to appreciate because he is not on the spot.

It is not difficult to decide whether "orders" or "instructions" should be given in any particular case. For a commander to be in a position to issue orders it is necessary that only a short time should elapse between the moment when the situation changes and the moment when he receives the notification of that change. Furthermore, he should be sufficiently close, as a rule, to reconnoitre the ground, or he should have reconnoitred it beforehand from the point of view of the particular operation in hand. It is possible sometimes for a subordinate to be in such close communication with his superior, especially by telephone, that orders can be issued when the former is some distance away from the latter. But such means of communication are very unreliable, and may fail at a critical moment. As a rule it is best for the commander to issue instructions when he is not on the spot, when he has not seen the ground, and when he cannot ascertain rapidly the exact local situation as regards his own detachment and the enemy. A detached subordinate should be taken more into the confidence of the commander than those who are acting immediately under his orders. It will be necessary sometimes to inform the subordinate what course of action will be pursued if the operations of the main force and the detachment are

successful, or if one is successful and one fails, or if both fail. In fact, these instructions will frequently disclose the results of an appreciation of a situation. At the same time due attention must be paid to the principles laid down in Combined Training, and no reasons should be given, or ambiguous terms used, unless the situation demands them and they are unavoidable. It should always be remembered that directly these principles are neglected an element of danger and of doubt is introduced which cannot but have a detrimental effect on the operations and are only justified when they eliminate some greater evil.

Staff officers can be given opportunities during a Staff Ride of practising the preparation of telegrams, especially long telegrams describing a situation or conveying instructions. A commander, after describing what has occurred, should finish up his telegram by stating what he proposes to do next.

Orders and instructions sent by telegraph require the most careful scrutiny before they are despatched. It is a good plan to show them to an officer who knows little of the situation, and ask him what he would do if he received such a message. It is of little use to ask him if he understands it, because he may do that without discovering any mistakes.

When writing telegrams the word "stop" should only be inserted where it is necessary to make the meaning clear, and where it cannot be misinterpreted. The following telegram will explain this: "Your suggestion approved stop the troops proceeding to ex those to wye and zed and the detachment at kew must be completed to ten days rations."

This is taken from an actual telegram, and was interpreted to mean that the troops proceeding to ex were not to go. The word "stop" was unnecessary and misleading.

CHAPTER XVI

NOTES ON THE WORK DONE BY OFFICERS DURING A STAFF RIDE (*continued*)

C.—Reports of all Kinds, especially Reconnaissance Reports, under the Sub-headings:
(1) Security; (2) Attack; (3) Defence; (4) Administration.

D.—Sketches.

E.—Diagrams and Graphics.

Staff officers in war will be required constantly to reconnoitre ground for the purposes detailed in Chapter XI., and to furnish reports, and sometimes sketches, to describe and illustrate the result of their labours.

A commander who makes a similar reconnaissance for himself does not write any report, but he rides over the ground, thinks what he would do to meet each requirement of the situation, makes mental notes of various important points, and then returns to his headquarters and issues his orders.

A staff officer by his report and by his sketch, supplemented sometimes by verbal amplifications, is required to place his commander in possession of all these items of information, his report taking the place of the commander's personal reconnaissance.

In war no doubt the commander would usually reconnoitre the ground for himself, but occasions occur when he is compelled to rely on his staff for this work; and in any

case these reconnaissances in peace-time form a very valuable medium of instruction to the staff officer.

To produce really good work the staff officer, either in a peace exercise or in war, must use his imagination. He must create in his mind a picture of the troops or the transport, &c., actually carrying out the task he is considering. Imagine a brigade moving forward to the attack over that ground in front: where will the difficulties arise? what are the important tactical points to be captured in the various stages of the operation? Then again imagine a brigade of artillery detraining on one platform of a station and a brigade of infantry at another. At what intervals can the trains arrive? what is to become of each gun, man, and horse as he gets out of the train? The staff officer must actually conjure up in his mind the scene of confusion and noise which will certainly arise at that station unless his arrangements are good.

The report which he prepares must contain no padding; difficulties should not be presented merely to be knocked down; a simple statement can be made that certain difficulties which usually exist in such operations are absent. Real difficulties should be recognised, appreciated at their value, no more and no less, and suggestions put forward to overcome them. An *aide-mémoire* for reports of this nature is a dangerous thing to rely upon: it offers a temptation to insert details which do not really matter, and, owing to the general manner in which it must necessarily be prepared, it does not give due prominence to the few important points which above all else dominate the solution of the particular task in hand.

It is a good rule to commence a report with a brief summary of the results of the reconnaissance. This will enable the commander to ascertain at once the general suitability of the locality for the purpose required, and may save him the perusal of several pages, only to discover

in the end that it is impracticable to carry out his original intentions.

For example, the report on a railway station might commence as follows:

The station is unsuited for the rapid detrainment of troops. There is only one exit from the station up a gradient of one in ten. The platform on the north side cannot be used, because the only egress is for foot passengers up a stairway, and no other could be made. Only one train could be received at a time. The detachment would take at least thirty-six hours to detrain.

Having read this paragraph, the commander would have obtained probably all the information he wanted. It would be necessary, however, for the staff officer to complete the reconnaissance, in case the station was required in spite of its disadvantages. The report should proceed with the various details, which should be arranged in the same order as the successive stages of the proposed operation. If we adopt this manner of building up the report in logical sequence, we shall produce high-class work; we are not likely to forget important items of information, and our work will be readily understood.

It is very desirable that the report should be easily read. The greatest offenders in this respect are people who have what is called a good handwriting. It may be nice to look at, but it is frequently very difficult to read. The same applies to the names of places. Officers sometimes print them in block capitals, but do it so badly that they are more illegible than if they had been written. Abbreviations such as "Bat" for battalion, A.G. for advanced guard, &c., should be avoided. When writing numbers it is advisable to distinguish between the designation of a brigade, &c., and the number of brigades, writing the first in figures and the second in letters. Thus: 2nd brigade, and two (not 2) brigades.

C. (1) *Reconnaissance of ground for purposes of security.*

A reconnaissance of this nature is naturally divided into two classes, one when the force is moving, and the other when it is halted.

To deal first with the force in motion, protection may be required either in front, in rear, or on the flank of the main body. As a reconnaissance for each of these purposes would be conducted on a somewhat different principle, it is as well to deal with them separately.

When the force is advancing it may require an advanced guard, a flank guard, or both. The duties of an advanced guard are laid down in Combined Training, and the reconnoitring officer cannot do better than follow the sequence of these duties.

The first of these is to guard against surprise. It would be necessary, therefore, to examine the country and report whether it would be difficult or easy for the mounted troops with the advanced guard to discover the approach of an enemy. In very close country where movement is confined to the roads and where the view is limited patrolling would be slow and difficult. In close country patrols could get about easier than formed bodies either of infantry or cavalry. In open country patrolling would be easy, but owing to the distance patrols must go to avoid the main body being surprised the information they obtain may be slow in arrival.

The reconnoitring officer when examining the country will look for points whence the patrols can obtain a good view towards the enemy, and will also notice the points where the enemy would obtain a good view of our own advance.

The next duty is to push back the enemy, if he is met in small numbers, and prevent the march being delayed. The reconnoitring officer would endeavour to discover

where small bodies of the enemy would be likely to interrupt the march, and would briefly note the best manner of driving him back.

The third duty is of a more serious nature, and therefore should demand the careful attention of the officer. If the enemy is advancing in superior force, he is to be held in check and compelled to deploy. This will require an examination of the country to discover where suitable positions exist along the line of march for the advanced guard to carry out its instructions. An advanced guard commander if he knew of these positions beforehand would look upon them as so many stages in his progress. As soon as he had gained one, his next object would be to reach the other, and, if he was prevented by the enemy, he would naturally make his stand on the position just passed.

The reconnoitring officer should report on these positions, chiefly to indicate how they can be occupied in great haste by the troops of the advanced guard deploying from the road. The most important point of each position is the locality which, if captured by the enemy, would compel the advanced guard to fall back. This tactical point should be clearly indicated in the report, so that the advanced guard commander will secure it before any other point. The strength of the position should be noted, especially its apparent strength when viewed from the enemy's side; the field of fire; possibility of co-operation of artillery and infantry, and the security of the former as regards the flank and also as regards covered lines of approach and retreat. The advanced guard commander would not care to risk his guns on a position from which, if in danger of capture from the enemy, they could not possibly retire.

The fourth duty of the advanced guard is to endeavour to ascertain the dispositions of the enemy if his advanced troops are driven back and he is found to be acting on the

defensive. Previous reconnaissance of the ground in this case would be invaluable. The reconnoitring officer would have discovered all positions along the line of advance which the enemy would be likely to hold, and whilst riding over them he could make a fair guess at the places where the flanks would rest and the number of troops which would be required to defend each position. For example, the reconnoitring officer might report that there is a suitable position for the enemy to occupy at A, but that it could not well be held by a force larger than two brigades or smaller than one brigade of infantry, and then add other details. Or again he might discover a position at B which might be held by one or two army corps, but if held by a division would be easy to attack directly the flanks of the defence were discovered.

Finally the report would call attention to any points on the road which it would be dangerous for the main body to pass till the advanced guard had made good certain other points in front. He might also draw attention to facilities for signalling between the advanced guard and the main body, or between cavalry patrols and the advanced guard. He would note any bad places on the road, steep gradients or any other likely cause of delay to the main body, and his report would be complete.

It would only be possible to execute such a reconnaissance when the independent cavalry happen to be well in front of the main army, or the protective cavalry are about a day's march ahead. If the independent or the protective cavalry were likely to be driven back by a hostile advance, such a reconnaissance before the ground was occupied by the enemy would be invaluable.

A reconnaissance for the protection of a flank would be required when the probable direction of the enemy's advance was unknown. Directly a flank guard begins to perform its functions as such it immediately becomes an

advanced guard, and is subject to the same requirements as regards reconnaissance. The only difference is that the flank guard must move in a crablike fashion so as to keep pace with the main body and at the same time be prepared to form battle to a flank.

The reconnoitring officer when examining the ground and preparing his report could deal with the subject in the same order as suggested for an advanced guard. As it would be undesirable for the flank guard to do much in the way of advancing still farther to the flank, the route to be followed by the flank guard would be carefully selected by the reconnoitring officer so that it could move from one flank position to another along the whole of the line of march.

As the flank guard whilst invariably facing to a flank for fighting purposes is also advancing to the front for marching purposes, the head of the guard when marching and the flank nearest the advanced guard when halted will require careful consideration. It is probable that the flank guard commander would endeavour to gain a footing on the next flank position before leaving the first. The reconnoitring officer would pay attention to this requirement, especially as regards the distance apart of the various flank positions he discovers and the security of the flank nearest the advanced guard.

It would be rare that a force advancing or retiring with a flank guard would not also have an advanced or rear-guard. The danger, especially during an advance, where the forces are meeting, would be that the enemy might penetrate between the advanced guard and the flank guard.

A reconnaissance for a rear-guard is generally possible, unless the main body is completely surrounded by the enemy, which frequently occurs in tribal warfare, but rarely during an ordinary campaign. The usual action of a rear-guard is described in Combined Training, and the recon-

noitring officer cannot do better than discover how far the country lends itself to the requirements of such a detachment as laid down in that book, and report accordingly. Combined Training says that the rear-guard is required to take up "a succession of defensive positions, which the enemy is compelled to make dispositions for attacking or turning. When these dispositions are nearly complete, the rear-guard moves off," &c. There is a sort of popular idea amongst officers that this sort of thing can go on for a whole day, and of course it is quite possible that this may be so, especially with a small force. With modern weapons, however, the rear-guard is rarely called upon to take up more than one or two positions, unless the main body has drawn off during the night and the rear-guard has to keep back the enemy throughout the following day. Even in that case the pursuit will probably consist of cavalry and horse artillery only, and then, as directed in Combined Training, the rear-guard must occupy a wide front with the greater part of the force in the fighting line.

It will be the duty of the reconnoitring officer to discover positions suitable for the above action, and it will be advisable, as in all tactical reconnaissance, for him to keep a copy of Combined Training in his pocket, to make sure that he has not forgotten anything.

Having selected the positions and paid due attention to the flanks, he will consider how the ground lends itself to a withdrawal to the next position. Combined Training directs that these positions should be sufficiently far apart to induce the enemy, after seizing one, to re-form column of route before advancing against the next. In open country this would mean that the positions would be more than two miles apart, because the "effective" range of field artillery is 3500 yards, and most people think it is a good deal more.

The great difficulty to be overcome by the rear-guard

commander is to get back his troops in any sort of order, and it will be advisable, as a rule, to divide his line into sections, each under a separate commander, and, as suggested in Combined Training, take care that these sections when retiring do not converge on each other. The reconnoitring officer, therefore, would endeavour to discover suitable lines of retirement for each section; he would pay particular attention to the last point which must be held by the troops when withdrawing, and notice whether it is possible by distant artillery fire to cover this point with shrapnel, and how the artillery could be informed as to when they are to open fire.

It is worth noting that with a comparatively small force like a rear-guard, whose only object is to delay the enemy, and at the same time secure its own retreat, it is better to avoid big open positions where the dispositions of the troops can easily be guessed, and which as a rule can easily be turned. Positions intersected by large woods, or better still along a river or stream, are much easier to hold and much more difficult for the enemy to attack. As a rule he cannot get good targets for his artillery in such positions, whereas the guns of the rear-guard can be placed in safety on the high ground behind the infantry instead of close alongside them. Of course, when the line of retreat from the river leads up open slopes which are under effective fire from the enemy's bank, such positions are unsuitable.

A reconnaissance of ground for the purpose of securing a force when halted usually involves the establishment of a regular chain of outposts. When the main body is halted for a short time this is unnecessary, because the advanced, flank, or rear-guards provide the necessary security. It is sufficient, therefore, to deal with a situation where the main body has halted for the night.

Outposts required immediately before or after a battle are described in Combined Training, and are dependent

on what is possible and not on what can be arranged beforehand. It is difficult, therefore, to reconnoitre ground for the purpose, though the method of establishing these outposts can form the subject for a tactical exercise on the ground, the immediate situation being provided by the director. An exercise of this nature is explained in Chapter XVIII.—A. Outposts.

The duties of outposts, as laid down in Combined Training, are, first, to protect the main body from surprise, and secondly, in case of attack, to gain time for the main body to occupy ground where it can fight. The reconnoitring officer must bear in mind these duties and frame his report accordingly. There are two distinct methods of guarding against surprise: the first is to watch and patrol the neighbourhood of the camp, and the second to watch the enemy so that he can make no movement without being observed. The first method until quite recently was advocated in Combined Training, and no mention was made of the second. The second method is now laid down, and no mention is made of the first. In war it is probable that either method would be employed, according to the circumstances of the case. There is no doubt that the second method is the best, when possible. The staff officer who in war reconnoitres the ground for outposts will usually confine his report to such details as it is necessary to convey to the officer commanding the outposts. The latter will then decide upon the exact distribution of the troops. These details are laid down in Combined Training, and include the locality of the bivouac, the position to be occupied by the main body in case of attack, the general position to be occupied by the outposts, the direction in which they are to retire, the degree of resistance which should be offered, the strength and composition of the outposts.

The reconnoitring officer must take all these points into

consideration, and it is advisable for him to have a copy of Combined Training in his pocket, so that he will not forget any important point. It is usual during a Staff Ride for three officers to be detailed for reconnaissance work in connection with a halt for the night. One officer works at the details of the bivouac, another officer decides upon the fighting position, and the third officer will arrange for the outposts covering the fighting position. These officers proceed to the ground together, and must first locate the fighting position and the bivouac. The method of reconnoitring the ground for the fighting position is very similar to that described below under heading C. (3) Defence, because in the first instance the main body, moving out of the bivouac, will immediately adopt a defensive attitude, whatever subsequent course of action may be decided upon. The reconnaissance of a bivouac is described below under heading C. (4) Administration.

The reconnoitring officer detailed to select the outpost position having ascertained the locality for the bivouac and for the fighting position, will proceed to the front and decide upon the best line to select for the outposts, having regard to the requirements of the particular situation and of the principles laid down in Combined Training. The mistake that is usually made is to cover the bivouac with outposts, but to fail in covering the fighting position. This is apt to lead to disaster, because the outposts may be driven off the fighting position before the main body has time to occupy it. If it is necessary to place the outposts on the fighting position, the latter must be so strong naturally that the outposts will have little difficulty in resisting a hostile advance ; if, however, there is any chance of the outposts being driven back prematurely, an abnormal number of troops will be required in the outpost line.

The report should commence with a brief statement describing the line selected, the chief reasons why it is

better than any other possible line, the lines of retreat available, the amount of resistance that can be offered, the number of troops required, and the general facilities of ground for reconnoitring towards the enemy. The report can then deal with all these matters in detail. A description should be given of the comparative strength of the various sections of the line; the localities where it is advisable to terminate each section; the line of retreat of each section; the result on the general line if one or other section is driven back; the one or two important tactical points which it is essential to retain till the last; the locality where each outpost company can best make a stand; the facilities for communication, by signalling or otherwise, laterally and to the rear; any difficulties in connection with forwarding food and blankets to the outpost companies; the nature of the country in front, whether suitable for patrolling, or whether it favours a hostile advance and a surprise attack; the employment of cavalry, artillery, or machine guns.

On a Staff Ride an officer can be directed to perform the double duty of reconnoitring officer and of officer commanding the outposts. In this case he would be required during the evening to write the orders which would be issued by the officer commanding the outposts, details of which are given in Combined Training. In fact, if an officer attends to all the points which are so clearly laid down in that book, he cannot fail to write a good report and prepare good orders.

If it is desired to reconnoitre an outpost position without maps, it is best to carry out a tactical exercise on the ground, as described in Chapter XVIII.—A. Outposts, the orders being written in the evening. A perusal of this exercise will bring to the notice of a reconnoitring officer some of the difficulties which usually arise, and which he must be prepared to deal with in his report.

C. (2) *Reconnaissance of Ground for Attack.*

There are two types of reconnaissance for attack; one is over ground which is still in the possession of our troops, but which may be shortly occupied by the enemy, and the other is when the enemy is already holding the position it is proposed to attack.

Opportunities for the first of these two occur more frequently than is generally supposed. For example, a force might be compelled to fall back to a certain position to meet reinforcements, and then be sufficiently strong to attack. Or again, an advanced guard might gain a position which it was evident must be given up, and the position which the enemy would subsequently occupy could be reconnoitred before he captures it. This form of reconnaissance is, of course, far easier than the other, where the reconnoitring officer can rarely approach near enough to gain an accurate idea of the ground, and where sometimes he is compelled to view it from beyond the front of the enemy's outpost line.

It is sufficient to describe the second, or more difficult, form of reconnaissance, because the reports on each would be drawn up in a similar manner. There are two methods of conducting a reconnaissance of this nature. One is to make a general examination of the ground, to discover the best direction for the main attack, how the artillery and cavalry should be disposed, where the local and general reserves should be placed, the general scheme of battle administration in rear of the fighting line, and the position to be occupied in case of failure.

Such a reconnaissance would usually be made by the commander of the force himself. He would ride as close to the enemy's position as he could get; he would make mental notes of all important details, and the result of his reconnaissance would be apparent in his orders. It is not usual

during a Staff Ride to direct the commander to write a report on what he has seen and what he has decided to do, but there is no doubt that such a report is most valuable practice for the commander, though he would not write it in war. During a Staff Ride or a tactical exercise on the ground, we can do a great deal of work "by numbers" which must be done at the "double" in real war, and the advantage of this deliberate method, from the point of view of instruction, is very great.

When preparing a report of this nature, it is necessary to consider the various principles which rule the attack, and which are laid down in Combined Training. The officer conducting such a reconnaissance should know every available item of information regarding the strategical, tactical, and administrative situation, vide "Instructions to Reconnoitring Officers," Chapter XI. He should, in fact, have appreciated the situation from a strategical and administrative point of view before commencing the tactical reconnaissance. This would have enabled him to come to sound conclusions as to what it was possible and what it was desirable to do. The tactical reconnaissance would disclose whether an attack which was to be recommended strategically was also to be recommended from a tactical point of view, or whether, considering the tactical difficulties, it would not be better to forego the strategical advantage following a successful attack on one flank, in order to make much more certain of success by utilising the tactical advantages connected with an attack on the other flank. The tactical advantages or disadvantages would be discovered by studying the ground, which can be seen, rather than by endeavouring to discover the enemy's dispositions, which can rarely be ascertained with any accuracy until a heavy attack has actually been delivered.

The features of the ground in front will give some indication of the position the enemy is likely to hold, and

possibly where the flanks are located, though this latter point will usually be very doubtful. The nature of the position may also give some indication of the strength of the enemy's force—that is to say, whether such a position is likely to be held by an army corps or only by a division. Having gained some idea of the extent of the enemy's position, the reconnoitring officer should ride along the front, examine the ground carefully, compare the various features in front of the position, and consider whether they are favourable to the attack or the reverse. Above all he should endeavour to discover if there is any salient in the enemy's position, either along the front or on the flank, because such a point is a distinct weakness in the hostile dispositions for battle, and cannot always be avoided, owing to the features of the ground.

Experience during peace exercises shows that officers are inclined to look upon an enemy's position as a fixed line with definitely located flanks; that it is only necessary to select the flank which appears to be the most suitable to attack, move the troops to that flank, and deliver the attack. This idea has no doubt arisen from studying former battles, where cavalry were collected behind the line of battle, and were not employed with any vigour on the flanks. The modern method of using cavalry, when the advanced troops of the opposing infantry are once in contact, is to guard the flanks and assail the enemy's flanks. It is doubtful whether the attacking cavalry will be able to drive back the defending cavalry, and thus lay bare the flank of the infantry defence, but until this is done it will be impracticable to launch an infantry attack against that flank, and it may be necessary to undertake two operations, one to assist the cavalry to drive back the hostile mounted troops, and the other to attack the enemy's flank.

When studying the ground for attack, the reconnoitring officer should keep in his mind three distinct requirements.

The selection of a suitable fire position where it may be anticipated that superiority of fire can be obtained over the defence. Secondly, the locality where the ground appears to favour an assault of the main position. Thirdly, the arrangements which must be made to guard against counter-stroke.

The type of ground which is best suited to the attack is not always understood. Some officers think that if there is a wood in front of the position, it will be an advantage to the attack, because the troops can reach the far edge of the wood without being seen and without heavy loss. The experience of war shows that a wood of this nature is a disadvantage to the attack, if the far edge is under hostile infantry or artillery fire. It is easy for the attacking troops to reach the far edge, but it is most difficult to do anything more when they get there. Woods and large villages absorb an enormous number of men both in the attack and the defence, and a comparatively small proportion of these are actually using their rifles with effect. It is very difficult to initiate an attack from a wood, because the various units become disorganised during their passage through it, and because it is very difficult to get orders conveyed through a wood and arrange for any simultaneous advance. It is also difficult to ensure artillery support, because the trees hide the target.

Any physical or artificial features of the nature of a stream, or a hedgerow, especially when diagonal to the line of attack, though they sometimes give cover to the attacking troops, usually impair the cohesion and organisation of the attack, and consequently its energy.

The best ground for attack is where there are small undulations, with a few tactical points such as knolls, small woods, hamlets, farm enclosures, and small villages. These afford excellent points of direction for the attacking troops, good rallying points, which the engineers can

strengthen, in case of failure or counter-stroke, and, though they may be exposed to a heavy infantry or artillery fire from the defence, they usually afford a good deal of cover for the attacking troops. Furthermore, they provide convenient stages for the attack, their capture or occupation, one after the other, being the successive objectives of the battalions or brigades in front line.

The reconnoitring officer whilst examining the ground would note what extent of front to allot to each unit of the attacking force, according as to whether it was to deliver the main or the secondary attack. If there is any obstacle, such as a ravine or a wood, separating two parts of the attack, he would naturally make this a dividing line between two brigades, divisions, &c., so that the commander of each unit would have a better view of the ground and a better grasp of his troops than if the obstacle ran through the centre of his attack.

In a general reconnaissance of this nature it is desirable for an infantry and an artillery officer to work together. The infantry officer can point out the infantry requirements, and the artillery officer can indicate what it is possible for the artillery to do. If a report is written, the two officers should prepare it together, and not separate the infantry details from those of the artillery.

The distribution of the cavalry would depend on the strategical situation, the opposition offered by the enemy's cavalry on one or both flanks, and the suitability of the ground for the action of the cavalry on one flank as compared with the other. It might be necessary to adopt a purely defensive attitude on one flank, if the ground is suitable, and thus release a larger number of cavalry for operations on the other flank.

A study of Combined Training, under the heading "Attack," will disclose many other points which it is necessary for the reconnoitring officer to consider. The

main object of the reconnaissance would be to compare different portions of the ground, weigh the advantages and disadvantages of one portion against those of another, and thus arrive at sound conclusions as to the distribution of the troops at the commencement of the battle, the locality for the main attack, the possibility of gaining a good fire position, the point to be assaulted, and the close co-operation of the cavalry, artillery, engineers, and administrative units with the infantry throughout the whole operation.

A more detailed reconnaissance for attack would be made by commanders or staff officers of the divisions or brigades allotted to various parts of the front. The reconnoitring officer would be given clear instructions as to the particular part the division or brigade was to take in the attack. He would then reconnoitre the area of ground allotted to him in order to discover the best means of carrying out the attack.

He should endeavour to picture in his mind the troops assembling for the attack, moving forward, deploying, advancing to the fire position by successive stages, and finally, if necessary, delivering the assault, the operation being supported throughout by the artillery, and helped forward by the engineers, administrative units, and, if on a flank, by the cavalry.

His report, after a brief statement indicating the result of his reconnaissance, should be built up in this manner in logical sequence. He would consider the ground outside his area as regards the assistance his division or brigade could give to another on its flank, either by the capture of certain tactical points or by artillery fire. He would ascertain if any other unit of the force could by a certain course of action materially assist the operations of his own brigade or division. He would pay attention to the possibilities of conveying ammunition to the front and taking

superior forces to meet the enemy later, passive defence is justifiable, but in no other case can it be resorted to without the certainty of ultimate defeat.

A plausible theory of defence, which it is advisable to examine, has been allowed to dominate the tactics of some commanders in the past, not always with success. The idea has been that a force should occupy a defensive position, allow the enemy to attack, and when he has become disorganised and demoralised, to issue from the position and deliver a great counter-stroke. This method was adopted with great success by Wellington at Salamanca, by Napoleon at Austerlitz, and on a few other occasions. There is, however, a great danger that the defender will wait too long, or employ too many troops in the defence, before deciding to deliver this great counter-stroke. In the result he is defeated before deciding that the right moment has arrived for the delivery of the counter-stroke.

The difference between these two types of defence is very marked, and can easily be explained. In the Austerlitz or Salamanca type the dominating idea in the mind of the commander was to attack; in the other type it was defence. In the first case the commander made all his arrangements for battle with the object of compelling the enemy to initiate a difficult attack, retaining meanwhile a powerful and well-placed force ready to attack over suitable ground. The defensive part of his project was merely intended to facilitate his attack, either by throwing the enemy's troops into confusion, exhausting their energy, deceiving the enemy as to his object, or simply to protect the flank of his attack and secure a rallying-point in case of failure.

In the second case the commander has become so engrossed with the defence, and has used up so many troops in the passive occupation of ground, that any idea of attack appears to be an afterthought. During the battle

troops have been employed to strengthen weak parts of the line of defence, and at the critical moment, when a heavy attack might change the wavering fortunes of the day, the reserves are neither well posted nor sufficiently powerful to produce any decisive result by means of a counter-stroke.

When two men are fighting it occurs frequently that one of them wishes to wear down the energy of the other by warding off blows rather than by returning them. His sole object, however, is not to continue this method until his adversary is exhausted, but merely until the balance of remaining energy rests with himself. He then proceeds to carry out his original idea, which was to attack and knock down his opponent. This appears to be the true principle to apply in war, and reconnoitring officers, when called upon to study a defensive position, will do well to bear it in mind.

Such a scheme of operations appears to offer great opportunities for freedom of action, for surprise, and for decisive victory. A battle is a struggle between two opponents who are skilled masters in the art of war. The passive defence of a goal or a wicket never won a football or a cricket match; neither will the passive defence of ground ever win a battle. The first duty of the reconnoitring officer is, therefore, to determine what part of the ground is suitable for attack and what part for defence, and to ascertain if possible what is likely to be the direction of the enemy's main attack. For example, the reconnoitring officer may discover that the enemy cannot make a powerful attack against the left flank because of that big wood or that stream; he is more likely, therefore, to attack the right flank. How can the offensive and defensive portions of the battle-field be utilised to deal with this probability to the best advantage, and also to meet any unexpected event? Shall the attacking part of the defenders' force be placed three miles away to a

flank, or close to the flank with sufficient room to deploy, or in the centre with each flank strongly defended?

Any one of these schemes is perfectly feasible, if only the ground is carefully reconnoitred, and suitable arrangements are made beforehand. There is no occasion to tie the attacking portion of the force too closely to the position occupied for defence—in fact, as a rule, it would be well placed somewhat wide of one of the flanks.

Whilst traversing the position the reconnoitring officer should carefully note all tactical localities which can be strongly held, or which are likely to be the object of a powerful attack. Streams, woods, enclosed country, natural obstacles, &c., should be made use of to facilitate the defensive part of the scheme, and the more open country devoted to the attack. The method of artillery co-operation will, as usual, be of extreme importance, second only to the facilities for infantry attack and defence, because the success of the latter is greatly dependent upon the former. A commander who is advancing to the attack full of confidence sometimes neglects to make adequate arrangements for defence, or in the endeavour to make a wide turning movement leaves a dangerous gap between the two portions of his force, just as Marmont did at Salamanca and the Allies did at Austerlitz. In any case he cannot be strong everywhere, and if his main attack can be delayed by a strong defensive position, a favourable opportunity is presented for making a heavy attack upon the weaker portion of his army. Officers when reconnoitring the defensive portion of the battle-field should pay great attention to the defence of the flanks. The usual method is to refuse the flank; this, however, creates a salient at the weakest part of the line where the enemy's main attack is likely to be driven home. If possible this salient should occur more towards the centre of the line of defence, where a holding attack may

be anticipated. The method in that case would be to hold the original flank with advanced troops, and prepare a second position in rear which would be the main line of defence, the inner flank of this second position resting on some part of the original line of defence. By this means a powerful front can be presented to the enemy's main attack.

If the general reserve is placed well beyond and perhaps somewhat in rear of the flank, there is no occasion to adopt the above method, because if that flank is heavily attacked the reserve will be in a good position to drive back the assailant. Before finally deciding upon the general scheme of action the reconnoitring officer should ride out towards the front, and consider how he would attack if he was commanding the enemy's force. This will disclose many weak points in the defence and possibly the direction of the enemy's attack, besides furnishing a good idea of the enemy's artillery scheme of action.

The report would commence with a general statement of the proposed scheme of battle, with the reasons for adopting it, and its main advantages and disadvantages. The offensive portion of the scheme would then be given in detail, with a full description of the advantages offered by the ground, facilities for the co-operation of the three arms, and alternative courses which might be adopted to meet unexpected events.

The defensive portion of the battle-field would then be discussed, its comparative strength in various localities, the number of troops which would be required for its defence, and any alternative localities which should be fortified. The length of time and the approximate number of men and tools which would be required to complete the necessary field work and demolitions. How far the artillery on the defensive portion of the battle-field can perform the double duty of assisting in the repulse of the

enemy and, when the time arrives, supporting the counter-stroke. Finally the details of battle administration, and the facilities for retreat, should be dealt with.

It will be observed that a position occupied in this manner enables the commander to adopt a definite plan of action. There is no nebulous idea that later on in the day a counter-stroke *may* be delivered; the whole scheme of battle is based on attack. The defensive portion of the battle-field is a necessary adjunct to create the required situation, and to stand like a rock round which the fight will rage. The advantage will lie with the commander who makes the most skilful use of the ground, instead of inherently with the original attack. It is a battle, a great struggle for mastery, where blows are given and received, instead of an operation where one side attacks, while the other is content to receive and, may be, to ward off the blows, without striking out in return.

After the general scheme of defence has been decided upon, reconnoitring officers would be required to execute the detailed reconnaissance of ground for each part of the force. The officers directed to work out the counter-stroke would be informed of the plan of operations and the exact locality of the defensive position. They would then conduct their reconnaissance in the same way as suggested for an attack. *Vide* C. (2) above. The officers selected to work out the defensive portion of the scheme would conduct their reconnaissance much in the same manner as that suggested in Chapter XVIII., page 422, for a tactical exercise on the ground. When preparing a position for defence the best method is to select a series of tactical localities along the front of the position, make these as strong as possible—that is to say, commence by fortifying them, so that they may form the framework of the whole defence. Each of these tactical points should be garrisoned, if possible, by a complete unit—a company, half a

battalion, or battalion, with artillery support carefully arranged for.

These tactical points can easily be selected by considering what would happen to the general line of defence if the enemy were to penetrate at any one point. If this point commands other parts of the position in the neighbourhood, or if the enemy, after capturing it, could make it so strong that it would be extremely difficult to retake it, then it is an important tactical locality, and special arrangements must be made for its defence. If, on the other hand, the enemy after gaining this point could easily be driven back, or could not hold it because it is closely commanded from another part of the position, then it is not an important locality.

On some very open positions, like parts of Salisbury Plain, it is not easy to select tactical points, because if the enemy were to penetrate at one point, the line of defence being level, or nearly so, he might be able to retain possession of the locality and render the remainder of the position untenable. When this is the case it is best to create artificial tactical points, with trenches run back to defend the flanks, ready for occupation if required.

The great advantage of this system of defence is that it gives subordinate commanders in every part of the field a definite basis on which to frame their scheme of battle; they understand that whatever happens these tactical points must not be allowed to fall, and when deciding upon the use of supports and reserves will be careful to retain sufficient for their defence. It is not intended that other parts of the line should be left unguarded, but merely that these important localities should be given the greatest attention.

The object of the infantry and artillery defence should be to cover the ground over which the enemy will attack with the greatest possible number of shrapnel and rifle

bullets; hence a good field of fire is very essential. It is rarely possible, however, to find a position where this can be obtained in all parts of the field, and it will be the duty of the reconnoitring officer to pay more attention to the weak parts of the defence than to the strong ones, always excepting the defence of the tactical localities.

A field of fire which is restricted by wood is not so bad as one which is limited by the slopes or undulations of the ground. As we have seen in the attack, though the enemy may be able to establish a fire position at the edge of the wood, it will not be easy for him to issue from it by day, especially if the edge of the wood has been prepared for defence by cutting V-shaped clearings at intervals of about 20 yards and piling the *débris* in an inverted V-shape between the clearings, thus making the edge of the wood in plan appear like a saw. It is extremely difficult to establish a fire position on the edge of a wood treated in this manner, and still more difficult to issue from it. A part of the position with a bad field of fire, which it is difficult to defend, can sometimes be safeguarded by posting supports ready to deliver a local counter-stroke if the enemy gets too close. Such a counter-stroke can usually be supported by covering fire from the defence, and probably will not be exposed to hostile artillery fire.

A large wood on a flank or in the centre of the position is probably not such a disadvantage to the defence as to the attack, though no doubt it causes an uneasy feeling in the minds of the defenders, who credit the enemy with being able to attack through the wood without difficulty. It is essential that such a wood should be most carefully patrolled, and some part of it must be defended, if possible a corner on the main position. When there are no clearings existing, these should be made 20 to 30 yards wide if possible, without any salients towards the enemy. It is quite immaterial whether the clearing is on the top of a hill, on the slope, or on the foot, but the defenders should

not look up hill if it can be avoided. If no clearings can be made, the only course to adopt if the enemy attacks through the wood is to attack him. To judge by history, all struggles of this nature in a wood are fought out on the crest of any hill that may be in the wood, and the side which is attacking for the moment is more successful than the side which is defending. If it is necessary for the defenders to attack through a wood, sufficient troops should be employed in the first instance to produce a decisive effect, otherwise reinforcements are certain to be required and a vast number of troops will be slowly sent into the wood without any adequate result. This may weaken other parts of the line, and the battle be lost in consequence.

Where the field of fire is restricted by undulations of the ground, every endeavour should be made to provide flanking fire, care being taken that the troops so employed are not exposed to enfilade fire from the attack. Failing this, arrangements should be made by machine gun and magazine fire to pour such a hail of bullets on to the crest of the undulation in front that no one can advance from it. At the same time it should be remembered that the presence of attacking troops so close to the defenders' position will have a bad moral effect on the defence, and it may become necessary to deliver a local counter-stroke to drive back the enemy.

If it is possible to clear any ground in front of the position, the reconnoitring officer should recommend the areas to be dealt with. Wholesale clearing is usually out of the question, but sometimes half an hour's judicious work will greatly strengthen the defence of the position. Perhaps the most important thing to look for is any obstruction to view, such as a hedge, a line of trees, or some bushes, behind which the artillery of the attack could find a concealed position which it would be difficult for the defence to locate. Other clearings should be made where

hostile infantry might be compelled to lie out in the open in their endeavours to establish superiority of fire, or where the attacking infantry have to cross some obstacle or are likely to crowd in to a point. Standing corn, high grass, mealies, or high crops of that nature are a great trouble to the defence; they give a feeling of uneasiness to the troops, and afford opportunities for sudden assaults by small bodies of the enemy's troops. In dry weather most of them can be burnt; otherwise they should be treated like woods, and clearings should be made.

The most effective obstacles, either natural or artificial, are those which come as a surprise to the attack. It is desirable, therefore, to leave them if natural, and place them if artificial on the near slope of any undulation, out of sight of the fire position which the enemy would naturally occupy behind the crest. A long obstacle, such as a stream, thick hedge, or wire entanglement which runs diagonally across the line of advance of the attack, is very effective, especially if it is enfiladed from the main position. In fact, if there is plenty of time available, it would be desirable to construct such an obstacle on the ground where the enemy is likely to make his main attack. In order to increase the breadth of the obstacle across the front of the position and to reduce its length towards the enemy it can be run diagonally for some yards, and then parallel to the front for a few yards, and then again diagonally. Such an obstacle, however, would use up a great quantity of wire.

Great attention has been paid in the past to the dimensions of various shelter trenches, and most of us have learnt a good deal on the subject. We are all familiar with the excellent rifle-pit which the soldier digs for himself during company training, and which is usually provided with an elaborate loophole, which the man cannot shoot out of, and which would easily be knocked down by a golf ball. We are generally required to dig these entrench-

ments behind a barrack wall, or in the ditch of an old fort, and it is quite immaterial from a tactical point of view whether the trench is dug seven or five yards away from the wall. This is good exercise for the muscles of the soldiers, but it does not teach either the officers or the men the exact tactical position where the trenches should be placed.

During a tactical exercise on the ground, or during a reconnaissance for defence, great stress should be laid on the exact position of the trenches both for infantry and artillery, because, although we are not going to dig them, we can decide exactly where they would be dug in war, and this is very valuable instruction. It will be found that somewhat divergent views are held by different officers as to where they should be placed, and extremely valuable discussions will arise before a final decision can be given.

The reconnoitring officer should bear in mind one important point: however elaborate his scheme of defence may be, with flanking fire, advanced posts, &c., there should only be one main line of defence. The idea of occupying a forward position and then falling back and occupying a position in rear partakes of the nature of a withdrawal of troops that are heavily engaged. Every one is agreed that this is a hazardous operation, and if adopted in battle may lead to one or two undesirable results. Either the forward, and presumably the weaker, position will be reinforced, and the battle will be fought out under conditions which are not the best available, or when the forward position goes the back position will go too.

It is safer in every way for every man in the force to know which is the main position to be held, and that it is the only position. The field of fire from part of it may be bad, but on an average the whole line of defence should be the best available. Advanced posts may be held by the defending troops, and ground still farther to the front can

be occupied by outposts; but very careful arrangements should be made for the outposts to withdraw when driven back, and for the advanced posts to be either reinforced, withdrawn, or left to their fate till nightfall, according to the circumstances of the case. There is no serious objection to having two lines of defence on a flank, as suggested when discussing the defence of a flank, because it is the lesser of two evils. The back position would be occupied as the main position directly it became apparent that the main attack was being delivered against the flank, and before the troops on the front position had become too heavily engaged to be withdrawn. Or a portion of this first position could still be occupied as an advanced post, as suggested above. The chief point to remember is that there is only one main line of defence, which is to be defended to the last, and that this line should contain no marked salients.

There are many other points, such as the concealment of the shelter trenches, the provision of head cover, &c., which are clearly indicated in Combined Training, and which the reconnoitring officer can refer to during the progress of his work.

There is one point which is also referred to in Combined Training, but which is worth emphasising. Under former conditions of war a blow against the flank of a defensive position has always been considered to be the most effective method of delivering an attack both from a strategical and a tactical point of view. The efficiency of this blow is greatly increased with the long-range weapons of the present day. The defence to meet an attack against its flank must to some extent form front to that flank, and this is the opportunity for the artillery of the attack first to enfilade the original line of defence from beyond the flank, secondly to enfilade from the front the defending troops that have formed to the flank, and thirdly to bring

a great superiority of fire to bear on the angle between the front and the flank.

With the old short-range artillery, as at Ligny, only a few French guns could bring converging fire against the salient at St. Amand, because there was no room for more. With the increase in range the length of arc on which the guns can be placed is enormously increased. The defence, on the other hand, has gained little or nothing in this respect; the artillery and infantry fire from any salient must be divergent, and the positions available for guns are bound to be extremely limited.

C. (4) *Administration.*

Omitting battle administration, which has been sufficiently discussed already, reconnaissance for administrative work on the ground can be considered under the headings Bivouacs, Railways, Supply, Transport, and Lines of Communication. The present Field Service Pocket-Book is so full of information regarding these matters that a reconnoitring officer cannot do better than consult it whilst carrying out his work. It may be useful, however, to suggest a few points which experience shows have been neglected in the past. A reconnoitring officer when writing his report, and after describing briefly the result of his reconnaissance, should pay particular attention to the most important matters, and should not crowd out these, or obscure their prominence, by inserting a lot of details which are really unnecessary and which could be relegated to an appendix.

Reconnaissance for a Bivouac.—Thus, in a bivouac, the important administrative questions are the supply of water, food, forage, fuel, and blankets to the men and horses, facilities for getting out of the bivouac in good tactical order and sending back the administrative units

which are not required. The health and rest of men and horses, the easy transmission of orders, the policing of any villages in the neighbourhood, facilities for getting into the bivouac on arrival, and the avoidance of any blocks or confusion in or near the bivouac.

Officers do not always realise, when making their reports and sketches, that the water must reach the mouths of men and animals, otherwise it is useless. It is not sufficient to state in the report that horses are to water at the place marked A on the sketch, and men are to get drinking water from the place marked B. It must be remembered that the transport horses of the infantry and the riding and draught horses of the artillery and cavalry have to be taken down from their particular bivouac to A. If they all go down together by the same road, or by two roads which converge into one, and if they all come back by the same road, the result will be chaos. If, on the top of this, the transport arrives, and endeavours to get into camp, the roads become helplessly blocked; half the horses get no water, and the men get neither their food nor their blankets. The reconnoitring officer must picture in his mind the arrival of the head of the column, the direction of each unit to its allotted bivouac, the orders to be given to each unit on arrival regarding water, &c.; the watering of the horses, the filling of the men's water-carts; the arrival of the transport, and the orders it is to receive as to where it is to go to find its unit, and where the horses are to water; when and where the supply waggons are to fill up after the day's ration has been issued to the men; the routes that are to be taken by the units themselves and by everything that belongs to them when proceeding to their bivouac, when sending horses to water, or supply waggons to fill up; the method of getting the fighting portion of the force out of the bivouac into its fighting position and the administrative portion into a suitable and safe locality.

If the reconnoitring officer follows out all these movements in imagination, and writes his report accordingly, he is certain to do good and useful work and to learn a good deal. The officer who has reported on the bivouac should also be directed to write the orders that would be issued to the troops on arrival: these would include all instructions which it would be necessary to issue to each unit on arrival, as described above. The officer who reconnoitred the fighting position should, in conjunction with the officer who reconnoitred the bivouac, write orders for the occupation of the fighting position in case of the alarm being given. In these last orders the object would be to get the troops forming the front line of battle on to the ground as rapidly as possible, the remainder forming the local and general reserves to follow when the roads are clear.

Reconnaissance of a Railway Station.—The reconnaissance of a railway station is usually required to ascertain the existing facilities for entraining and detraining fighting and administrative units, and loading or unloading stores of all kinds. As recommended for the other reconnaissances, the officer, when preparing his report, should follow, in imagination, the various operations that must be undertaken, and consider the arrangements it is necessary to make to facilitate each stage of the operation, and to anticipate and overcome all the difficulties which are likely to arise. For entraining troops he should consider what orders it would be necessary to issue to start the various units from their bivouac, and to bring them along suitable roads or tracks to the point of assembly near the railway station, in time to commence entraining at the required moment. He should then consider their requirements whilst waiting at the place of assembly, the provision of water, latrines and, in special cases, food and fuel. The object should be to arrange so that each unit

directly after it has arrived will commence to entrain. A place for assembly is desirable, because it facilitates the allotment of duties and fatigues to various companies batteries, squadrons, &c., and enables the guns, waggons, and transport of all kinds to be collected in proper order for loading on the train. Each entraining platform therefore should have its own separate place of assembly.

The next thing to consider would be the provision of the necessary trains, at the proper platforms, at the required time. This would involve a careful examination of the railway station so as to use to the full its existing resources, and suggestions for such improvements or additions as time would permit. The reconnoitring officer should be informed, if possible, of the intervals of time at which trains can be received at the detraining station. If this is impracticable, he should draw up his time-table, with a due margin for safety, to show the intervals of time at which trains can be despatched. Later on, if it is found that the detraining station cannot receive trains at such a short interval, the time-table must be changed, though of course the intervals cannot be reduced. Having completed all the necessary arrangements for bringing each unit on to its platform without interfering with other units or with shunting trains, the reconnoitring officer must arrange with the railway authorities the place where the trains are to be made up, how they are to be numbered and brought to their proper platform, how one train, which is too long for the available platform, must be cut in half, and each half shunted in turn to the required platform, and finally made up and despatched. If there is plenty of accommodation at the station, one platform should be kept vacant for any emergency which may arise, such as a breakdown when shunting or delay in loading. The unit which was to follow the one that is delayed can then be turned on to the spare platform, and though

one train will be delayed, the others will not be thrown out.

To reconnoitre a station for detraining troops or stores the officer would follow in his mind the various stages in the operation, as suggested above, and would show in his report what arrangements should be made to fulfil the requirements of the troops at each stage.

It is quite easy to imagine a train full of troops with their horses and some of their transport arriving at the prearranged platform. The men get out first: some who are not required proceed straight to the place of assembly outside the station; others unload the horses and vehicles. No one on arrival knows where they have to go, or what they have to do; but the station has been reconnoitred beforehand, arrangements have been made to overcome the most serious difficulties; a polite staff officer, who is acquainted with all the necessary details, is on the spot to help the regimental officers in every way he can, and the detrainment, instead of presenting a scene of noise and confusion, is a swift and orderly operation of war. The reconnoitring officer, bearing in mind these points, can easily foresee where the difficulties and confusion will arise. The platform at a certain place is narrow, and it will be difficult to get out the guns it is proposed to unload there. The only obstruction to making it wider is a nine-inch brick wall or an iron fence. This is easily destroyed and freedom of movement obtained. Doors must be taken off their hinges, partitions knocked down, and in some cases the roof over the platform is too low and must be removed. The carriages containing the men can be shunted away and the whole platform used for unloading the guns, horses, or transport; or if the men proceed in one train and the transport in another, the former can detrain without a platform and proceed to the station to unload their transport.

A point of assembly for units detraining is more important than for those entraining, because in the first case the men come out of the train in driblets, and in the second case they arrive from their bivouac as a complete unit. Latrines must be prepared, and police provided, so as to prevent the men of one unit leaving their platform to go anywhere except to their place of assembly. Arrangements must be made for the unit to march away from its place of assembly to its bivouac without crossing or interfering with any other unit which may be detraining at the same time.

In all these operations it is desirable to have a few non-commissioned officers on the platform simply to answer questions. A good deal of confusion and waste of energy is caused because neither the officers nor men know where they are to go or where they can find the latrines, place of assembly, &c. Men who ask legitimate questions are sometimes treated like malefactors, though it is frequently necessary for them to know the information they seek, and there is no reason why it should not be given to them in a civil manner. We all recognise the importance of keeping the *moral* of the troops at a high standard, and nothing improves it so much as when they see that proper arrangements are made not only for their comfort, but that an operation of this nature should go without a hitch.

It appears to be unnecessary to go into the multifarious administrative problems which require the reconnaissance of ground and buildings in war, as they can all be treated in the same way. The reconnoitring officer has only to picture in his mind the arrival of the unit or of the stores, what it is intended to do with them, and how it is to be done. It is easy for the reconnoitring officer to consider the human requirements of the men, and the administrative requirements of the stores in the way of protection from weather, breakage, looting, conveyance elsewhere, storage,

&c.; and then, after a careful examination of the locality, he can decide what it is best to do. Above all let him follow in imagination the complete operation, and arrange his report accordingly; he is then certain to remember important points which otherwise he might forget, and his work will be better and more practical than if based entirely on a long list of requirements taken from a book.

D. Sketches.

A sketch should be better than the map from which it is copied. This is a maxim which it is well for the reconnoitring officer to bear in mind, and he may save himself a vast deal of unnecessary labour and produce more useful work.

Sometimes there is no map available, or the map is so bad or so inaccurate that an indifferent sketch is better than the map, and instead of being copied from the map it must be drawn from the ground; but in any case the above maxim still holds good.

There is another point about sketching which it is as well to realise: however good the operator may be, it takes a long time to make a sketch of a piece of ground unless there is a good map available to copy from. This seriously detracts from the general utility of sketching, and we find that though in peace exercises we do a good deal of sketching, we do little or none when we go to war. In war there is too great a demand on the time and energy of staff officers to do much in the way of sketching, unless two forces are opposing each other in the same locality for several days, or even weeks, as occurred in South Africa and in Manchuria. There is no doubt, however, that military sketches in the vicinity of where a force is operating are very valuable if systematically organised and special officers told off for the work. Troops of the

British Army are constantly required to penetrate into unmapped districts, and a military sketch of such a district will be invaluable when later on another force is required to go to the same region.

It is desirable, therefore, for staff officers to practise sketching during these peace exercises, and with a little trouble, perseverance, and good instruction the worst exponent of the art can be taught to produce work which is distinctly better than a bad map. Sketches are required even more for administrative than for strategical or tactical purposes. They are usually on a large scale, and portray some small locality, like a post on the lines of communication, a railway station, or a bivouac.

Sketches, even of the roughest nature and when only one copy can be made, are extremely useful for a bivouac. The staff officer who meets the troops can show the commander the sketch and tell him: "You are to follow that track till you come to three trees standing 100 yards west of the road. Your bivouac is anywhere north of an east and west line through those trees. A brigade of artillery will be bivouacked south of you and west of the road, and a brigade of infantry south of you and east of the road. Your horses are to proceed to water by this track and come back by this one; the water-carts for drinking water are to go along this track and return by it. After 5 P.M. you are not to use any of these tracks, as they will be required by such and such a brigade. A non-commissioned officer is posted at the three trees to show the way to the water, and your men are not allowed to go any other way. Your transport will come in to your bivouac by this road," &c.

It is not difficult to prepare a sketch which is sufficiently accurate to illustrate the staff officer's directions as explained above, and the sketch gives the commander a clear idea of where every one is and what he has got to do, even

if he cannot take the sketch with him. When dealing with a railway station two sketches are usually required: one, on a large scale, to show the administrative details inside the station, and the other, on a much smaller scale, to show the places of assembly, latrines, road to the bivouacs, &c. The first sketch can be bounded by the ground where the operation is actually to take place—that is to say, the railway lines and those platforms where the waggons, guns, stores, &c., are to be unloaded. Directly the teams are hooked in or the men march away they would come on the small-scale sketch. Large sketches covering several square feet of paper are out of place in war, and should be discouraged during peace exercises. When it is necessary to illustrate a large area of country, such as the lines of communication of an army, it is best to have a small-scale map, and draw on it squares representing the areas which have been sketched on a larger scale.

It is very important that all military sketches should be printed up with reference to the north point, even if the edges are not orientated. It is most confusing for a commander who is constantly looking at the map, which is always printed up with reference to the north, to have to inspect and act on a sketch which appears to him to be all crooked. He knows the relative position of all important places on the map, and it is much easier for him to follow a sketch if it is printed in the same manner.

When a report is accompanied by a sketch, the information in the latter should be confined to such matters as any one would naturally look for when he was examining the sketch. For example, it is much better to put information regarding the surface of the ground on the sketch than in the report, whereas it would be easier to understand a complicated description of how troops could be watered by giving the details in the report or in an

appendix, instead of drawing a lot of arrows or dotted lines over the sketch. The number of pencil-marks that can be placed on a sketch is limited. Directly the sketch becomes confused it loses greatly in value, so that if there is any prospect of this it is advisable to put letters on the sketch, with corresponding letters attached to the necessary information in the margin. Lines drawn from a marginal note to a spot on the sketch to indicate where the note applies are confusing except for panoramas or road reports.

A sketch, like a report, should be prepared so that the greatest prominence is given to the most important military requirement at the moment. If it is the shape of the ground, the contours should be clearly marked and other details put in faintly. If the roads are the important item, then they should be shown more clearly than other features, and so on. It is always desirable to draw an arrow on the margin of a sketch showing the direction and distance to some prominent town or place, even though forty miles away, which every one knows (*see* the S.E. corner of Sketch No. 23). If at the same time the sketch is printed up with reference to the north point, the strategical, tactical, or administrative situation described in the report or on the sketch can be readily grasped.

Sketches sent in with a report should always be folded neatly, and never rolled up. It is most difficult to refer to a sketch which is constantly trying to twist itself up. Finally, there should be a heading on the sketch to show what it refers to, so that if it gets detached from the report it will not become incomprehensible.

E. Diagrams and Graphics.

There are so many different types of administrative work which require the use of diagrams or graphics

that it is difficult to give any accurate idea of how they should be prepared. Their chief object is to save long descriptions in prose, to simplify a complicated proposal of action and render it easier to understand.

An officer who prepares a document of this description sets to work in a manner which to him appears to be the best, but it is not always easy to discover the system on which he has worked. If the officer is present he can explain matters in a few words, and then everything is easy, but otherwise it takes some time to discover his meaning and appreciate his proposals.

Indifferent work of this nature is usually caused by a failure to keep in mind the main question at issue, and to allow it to become obscured by a mass of detail which is not always easy to follow. This detail is essential, but so far as possible it should be kept apart from the portion of the work where the results are produced, and it should be so arranged that these results can easily be verified.

For example, one of the most complicated administrative problems of war is to arrange for the supply of a force which is about to operate several days' march distant from the advanced depôt. On the frontiers of India, where the roads are bad and pack transport is required, the complication is increased.

We will suppose, therefore, that a division in India is required to operate five days' march distant from the advanced depôt, and that mule transport is required to keep it supplied. A certain amount of grazing is available, but half a ration of hay (or its equivalent) is to be carried to feed every mule working on the line of communications. The division is to leave the advanced depôt on June 1, and 10 per cent. spare mules are to be taken.

The main questions at issue are the number of mules which must be despatched with the division in the first instance, how they should be organised, and how many should leave the advanced depôt each day in order to keep the division supplied and to feed the mules on the line of communications.

Before commencing to work out the problem, we should in our minds appreciate the situation and make some private calculations which can be accepted without details in the finished work.

It is plain that if the division is going to start from the advanced depôt and march for five days without stopping, it will be necessary for five days' supplies to march with the division. As each day's march is completed, the mules that have carried the supplies for that day, having finished their work, can return the next day towards the advanced depôt to bring up more supplies.

The Field Service Pocket-Book informs us that a division in India requires 131,659 lb. of supplies daily. The division must start on June 1 with 131,659 × 5 lb. of supplies. These supplies must be carried by mules; other mules will be required to feed these animals, and also to deposit forage at the various stages on the line of communications, to feed the mules returning for fresh supplies.

Our first object is to discover how many mules must leave the advanced depôt and accompany the division during its first day's march. There are three methods of approaching this problem, but only one of them is satisfactory. First we can divide the total weight of five days' supply for the division by a mule's burden (160 lb.) and ascertain the number of mules required to carry it, add 10 per cent. spare, and then calculate how many more mules are required to carry forage for the first-mentioned, and how many more for the second, and so on till we come

down to half a mule. If we adopt this plan we shall find that great complications arise, and that it is most difficult to arrive at any finality.

For example, we ascertain that 131,659 × 5 and divided by 160 gives 4114; add 10 per cent. spare, and we get 4525. A mule's ration, according to the conditions given, amounts to 6 lb. of hay and 6 lb. of grain; add ½ lb. for a proportion of the driver's ration and we get 12½ lbs. Transport must be provided, therefore, to carry 4525 × 12½ lb., a total of 56,562 lb. This, if divided by 160, will give us the number of mules that can carry it, *i.e.*, 354. Forage for these 354 can be carried on 354 × 12½ divided by 160, which amounts to 53 mules. Five more mules are now required to carry their own rations and those for the 53.

So far we have provided transport for one day only. Some of these mules will be going on for five days, some for four, and some for three, &c., and it is not easy to discover how many will be returning each day. In fact, any one who attemps to solve the problem, working on these lines, will cover many pages of foolscap with figures, and at the end discover that he is no nearer a definite and accurate plan than he was at the commencement.

The second method is to calculate the weight of the rations required by the mules before they return to the advanced depôt, deduct this weight from 160, and the balance will give the proportion of the divisional supplies which can be carried by each mule. For example, ten days' supplies for a mule will be 125 lb.; this deducted from 160 gives 35 lb. Thirty-five pounds divided into 131,659 × 5 gives 18,808 mules, which could carry five days' supplies for the division and feed themselves for ten days. But here we have a great waste of strength, because if the mules are to go forward with the division many of them will be carrying nothing after the first day, and will

still be eating food themselves, and it will be extremely difficult to ascertain how many mules will be free to return to the advanced depôt each day.

The third method, which discloses the best way of dealing with most of these administrative problems, is to begin at the end and work backwards. If we can discover our requirements on June 5, when the division is reaching its destination, we can also discover our requirements on the remaining days till we get back to June 1.

It is plain that the division on June 5 must be accompanied by a column of mules carrying 131,659 lb., and also sufficient rations for their own consumption. Furthermore, that another column of mules carrying the same amount must arrive on June 6, another column on 7th, and so on. Forage for the first column of mules must be available all along the line of communications to feed the returning mules. We are concerned, however, for the moment with the number of mules that are to march with the division on June 5, from the fourth to the fifth stage. (See Graphic and Diagram on back of Sketch No. 1.)

Each mule will require one day's ration, so that, however the loads may be distributed, the available carrying power of every mule is 160 less 12½ lb., and less 10 per cent. of 12½ lb. for the ten spare mules that carry nothing—that is, 160 less 13·75 lb., *i.e.*, 146·25 lb. If we divide 131,659 by 146·25 we shall get the number required, viz., 901 mules. Add 10 per cent. spare and we get 991. We can now separate the supplies for the division from the forage. The division requires 131,659 lb.; this divided by 160, a mule's full burden, will give us 823; add 10 per cent. spare, and we get 905 mules who carry nothing but supplies for the division, and which we will call the supply column. The remaining 86 mules carry nothing but forage for themselves and the 905 mules. These 86 we will call the forage column. We will verify this last number before proceeding.

There are 991 mules to be fed; each requires 12½ lb., 991 × 12½ = 12,387½, which divided by 160 is 78 mules' burden; add 10 per cent. and we get 86 mules, which is correct. We see, therefore, that the total weight carried forward from the fourth to the fifth stage is 131,659 + 12,387·5 lb., a total of 144,046 lb.

We can now ascertain the number of mules which will be required to accompany the division from the third to the fourth stage on June 4. Two days' supplies must be carried for the division, one to be consumed on the evening of 4th and one on the 5th. We have already discovered that 144,046·5 lb. must be carried forward from the fourth to the fifth stage on June 5, and to this we must add 131,659 lb., one day's supplies for the division, to be consumed on the evening of June 4, a total of 275,705·5 lb.; this we will call the initial weight to be carried forward from the third to the fourth stage on June 4. The number of mules required to carry this and also one day's forage for themselves amounts to 275,705·5, divided by 146·25 lb.—that is, 1886 mules. Add 10 per cent. and we get 2074 mules. Of these we have already seen that 991 must go on from the fourth to the fifth stage on June 5, and the remaining 1083 can return unloaded from the fourth to the third stage on June 5. If we multiply 2074 by 12·5, the weight of one day's forage for a mule and a proportion of the driver's kit and ration, and add the 275,705·5 lb., we shall get the total weight to be carried forward from the third to the fourth stage on June 4—that is, 301,630·5 lb.

In the same manner, the initial weight to be carried forward from the second to the third stage on June 3 will be 301,630·5 lb., plus one day's rations for the division, 131,659 lb., a total of 433,289·5 lb. This divided by 146·25 gives us 2963 mules. Add 10 per cent., 3259. Of these we have already seen that 2074 must go

on from the third to the fourth stage, and the remaining 1185 can return from the third to the second stage on June 4. If we multiply 3259 by 12·5 and add the 433,289·5 lb., we get 474,027 lb., which is the total weight carried forward from the second to the third stage on June 3.

The initial weight to be carried forward from the first to the second stage on June 2 will be 474,027 + 131,659 lb., that is 605,686, which can be carried by 4142 mules; add 10 per cent., 4556. Of these 3259 go on to the next stage and 1297 return. The total weight carried forward from the first to the second stage on June 2 amounts therefore to 4556 × 12·5 + 605,686, which is 662,636.

The initial weight to be carried from the advanced depôt to the first stage on June 1 will be 662,636 + 131,659 lb.—that is, 794,295 lb., which can be carried by 5432 mules; add 10 per cent., 5975. Of these 4556 go on to the next stage and 1419 return. The total weight carried forward from the advanced depôt to the first stage on June 1 amounts therefore to 5975 × 12·5 + 794,295, which is 868,982·5 lb.

This completes the calculation required to ascertain the number of mules (5975) and the weight of supplies (868,982·5 lb.) which must leave the advanced depôt with the division on June 1 in order to feed it daily till it arrives at the fifth stage on the evening of June 5.

We must now produce another day's supply for the division at the fifth stage to feed it on the evening of June 6, and we can again work backwards as before, only in this case we only require to send one day's rations up the line of communications. The number of mules and weight of rations to go forward from the fourth to the fifth stage on June 6 is the same as on June 5—that is, 991 mules and 144,046·5 lb.

The initial weight to be carried forward from the third to the fourth stage on June 5 will be therefore 144,046·5, because this column of mules is not feeding the division at every stage, as was the case before. 985 mules can carry 144,046·5 lb., add 10 per cent., 1083; of these 991 go on to the next stage and 92 return. The total weight carried forward is $1083 \times 12{\cdot}5 + 144{,}046{\cdot}5$ lb., a total of 157,584 lb.

Similar calculations will disclose the number of mules and weight of supplies which must leave the second stage on June 4, the first stage on June 3, and the advanced depôt on June 2.

We can put these details into the form of a diagram or of a graphic (*vide* back of Sketch No. 1). The latter is the clearest, and shows at a glance where every mule is to be found on any particular day. The thin horizontal lines represent time, and the thin vertical lines represent space. All diagonal lines represent whatever is in motion, troops, transport, &c.; in this case, of course, they represent the columns of mules.

The left hand top square is marked June 1 on the top and advanced depôt on the left. We continue the dates on the top to the right, and insert the stages on the left of the squares towards the foot of the page.

Five columns of mules, each carrying one day's supplies for the division, leave the advanced depôt on June 1, and accompany the division. Each column is shown on the graphic by a thick black line. The column of 1419 mules which supplies the division on the evening of June 1 on arrival at the first stage is shown on June 2 by a thinner line returning unloaded to the advanced depôt.

Similarly the column of 1297 mules which supplies the division on the evening of June 2 on arrival at the second stage is shown returning unloaded to the first stage on June 3, and so on with the column of 1185 mules, &c., returning on June 4, &c.

One column of mules with one day's supply for the division leaves the advanced depôt on June 2, and is shown by a thick black line. The mules carrying forage for the other mules are shown each day returning unloaded to the last stage. Thus, on the evening of June 4, 1185 mules carrying 172,396·5 lb., including 10 per cent. spare mules, which carry nothing, arrive at the third stage. 102 of these mules, including 10 per cent. spare, were carrying one day's forage for themselves and the other mules; these return unloaded on June 5 to the second stage.

Some complications enter into the calculations for the column of mules which is required to leave the advanced depôt on June 3, carrying one day's supply to feed the division on the evening of June 7. The unloaded mules from the five columns which started on June 1 are returning to the various stages, and must be fed when they come in.

The graphic is of great assistance in ascertaining at a glance the number of mules that are returning at each stage. We must commence at the fifth stage on the evening of June 7, and we find that the number of mules to go forward from the fourth stage and the weight of supplies to be carried is the same as on June 6, 991 mules taking forward 144,046·5 lb.

The initial weight to be carried forward from the third stage on June 6 is therefore 144,046·5 lb. But we find that 991 mules arrive at the fourth stage from the fifth stage on the evening of 6th, so we must carry forward one day's forage for them—that is, 991 × 12·5 = 12,387·5 lb. The weight to be carried forward from the third stage on June 6 is therefore 144,046·5 lb. + 12,387·5 lb. = 156,434 lb. This requires 1070 mules, add 10 per cent., 1177. The total number of mules arriving at the fourth stage on the evening of June 6 will be 1177 + 991 = 2168.

Of these 991 go on, on 7th, to the fifth stage, and 1177 return unloaded on 7th to the third stage.

In the same manner we can ascertain the number of mules and weight of rations which must go forward from the second stage on June 5, from the first stage on 4th, and from the advanced depôt on June 3, as shown on the diagram and on the graphic. The column of mules which leaves the advanced depôt on June 4 and subsequent dates can be calculated in exactly the same manner.

On June 10 we find that 1973 mules are working daily between the advanced depôt and the first stage; 1661 mules between the first and second stages; 1398 between the second and third stages; 1177 between the third and fourth stages; and 991 between the fourth and fifth stages. These numbers would remain constant so long as the division drew its supplies from the fifth stage. Many complications might enter into these calculations; for example, the division might be required to advance farther from the advanced depôt, the line of communication troops at each post must be fed, or it might be desired to collect several days' supplies for the division at the fifth or any other stage; or, again, different forms of transport might be employed, such as mules, camels, elephants, bullock waggons, &c., part of the supplies being forwarded in one manner and part in another. Any one of these complications can easily be arranged for, provided we always begin at the end and work backwards.

The great object should be that no transport lies idle at any one stage, and no transport, except the 10 per cent. spare, goes forward empty.

The total number of mules employed on the line of communications on any particular date can easily be ascertained by adding together those that have left the advanced depôt and subtracting those that have returned

to it. Thus, on the evening of June 4, 5975+1419+1908 +1573−1419−122=8037 mules are working on the line. On the evening of June 10 or on any subsequent date the total remains the same and can be ascertained by merely adding up the number of mules working between each stage, which amounts to 14,400.

CHAPTER XVII

REGIMENTAL TOURS

THE scheme for a Regimental Tour can be prepared in the same manner as that suggested for a single Staff Ride, where only one side is represented by a party of officers, *vide* Chapter IX.

The scheme is of little importance compared with the tactical and administrative exercises on the ground. It is necessary as a foundation on which to base the various exercises, and also to introduce the required atmosphere of strategy and tactics. Though we do not wish to work out strategical problems, a certain amount of strategy is necessary in order to create a true tactical situation. For example, there should be a strategical as well as a tactical reason why one part of an attack is stronger than another, or why one part of a position should be occupied defensively while another part is used for attack, or why it is necessary to guard or secure one flank more carefully than the other either in attack or defence.

It is also desirable to have some continuity in the various operations it is proposed to work out, so as to make them more realistic, easier to follow, and more interesting for the officers than when a fresh scheme is issued every day. In the latter case there is a considerable strain on the resources of the director, and still more on the imagination of the officers who have to work them out.

The scheme should be prepared so that a different class of tactical operation can be studied each day. For

example, the director might wish to practise outposts one day, a small engagement another day, and an advance or a retreat the third day. It is most important that the regimental officers should be given opportunities of studying on the ground the class of operation they are likely to be called upon to deal with when they go to war. For this reason the size of the force should be limited to a couple of battalions, a battery or section of artillery, and a troop or squadron of cavalry, with the necessary administrative detachments.

Operations in which regimental officers take part on a large scale, such as an attack by a battalion forming part of a division, can be practised with real men during brigade and divisional training, or as an independent tactical exercise near the headquarters of the unit, as described in Chapter XX. The object of a Regimental Tour is to place officers in a somewhat independent position, where they must think and act for themselves, just as they are required to do when they are detached without any Generals or staff to help them in real war.

It is desirable to create a detachment of all arms, because it is good practice for regimental officers to study combined operations and learn something of the methods, requirements, and difficulties of other arms than their own.

With such a small force the scheme must be laid in a district where there is some sort of physical obstacle, like a large river, a range of hills, &c., which can only be crossed at a few places. Two battalions do not wander about a theatre of war, unless they are assisted by some physical obstacle to protect their front, or at least one flank, otherwise they are almost certain to be cut off and annihilated. The area selected should, if possible, be close to the place where the officers are to stay, so that no delay or expense will be involved in reaching the

ground. The ground should be broken, with small features, such as hills, farmsteads, woods, and hamlets, which will afford suitable tactical points to be attacked, defended, or watched. Open country such as great rolling downs, with few woods, farms, &c., is unsuitable for the purpose. A small force is lost in such country, which is more fitted for the operations of several divisions.

It cannot be expected that such areas will be found without some difficulty, and it is essential therefore that the ground should be selected first and the scheme drawn up to suit it. If the scheme is prepared first without visiting the ground, it is almost certain that the latter will prove to be inappropriate. There is no objection to holding the exercise near the sea, because this would secure at least one flank of the detachment. There is also no reason why a river should not be supposed to be larger than it really is, in order to increase its utility as an obstacle. It is a mistake, however, to make any other imaginary alterations in the features of the country where the operations are actually to take place, though there is no objection to supposing that mountains, defiles, passes, &c., exist outside this area, provided their locality is clearly explained with reference to the map or to a specially prepared sketch.

Regimental officers take more interest in the work if the scheme is based on some definite example from history (*vide* Chapter VII.). They realise that they are not being asked to do more than has been done by a similar detachment in analogous circumstances in real war. The scheme can be much shorter, and a brief account of the historical operations can be issued to the officers before they assemble.

The method of conducting the Tour is much the same as that already described in Chapter X., Mountain Warfare. The whole of the officers are taken on to the ground each day, and work out under the director the particular

tactical or administrative problem which it is proposed to deal with. A series of situations is given, and great attention is paid to the movements of the small units of a force, such as a company, troop, or section of artillery. It should be explained to the officers that the object of the exercises is not only to give them opportunities of studying on the ground the solution of small tactical problems, but also to instruct them in the art of teaching their own non-commissioned officers. For this reason, whenever it is decided to attack, the director should consider the question from the point of view of the officer commanding one of the leading companies. He should carefully discuss the verbal orders issued to this officer by the battalion commander, and then follow out, over the ground, the attack of this company.

It may be considered that it is difficult to do this without the company being actually present, but this is not the case. The company commander must first decide what scouts should be sent out and what they are required to do, then how many sections he should deploy, the direction of their advance, how the remainder of the company is to follow, &c. The same sort of thing applies to an officer commanding a battery or section of artillery, or a troop of cavalry. Any one can manœuvre small detachments of cavalry or infantry over open, undulating country, but in broken country it is not easy to see how guns can be brought up without being seen, the best position to place them where they can give effective support to the infantry, and where they are not themselves unduly exposed to sudden attack.

With small detachments artillery co-operation is more difficult than with large forces, because the troops occupy a comparatively narrow front; the artillery must keep out of range of hostile infantry fire if they wish to retain power of movement, the flanks are not well protected, and the

small infantry reserves are close to the front line. If escorts are to be provided for the guns the offensive power of the infantry is seriously reduced, so that with these small detachments infantry and artillery co-operation requires special consideration. Security is obtained by distant cavalry patrols rather than by the defensive action of infantry, and we see therefore that the combined action of the three arms is even more important with a small detached force than it is with a large force, the integral parts of which are specially constituted to look after themselves.

For an infantry or artillery Regimental Tour the services of an officer of the other arm should be obtained to conduct the operations of his own arm. For a cavalry Regimental Tour this is unnecessary, because small bodies of cavalry act so constantly without assistance from horse artillery or infantry that there is no occasion to introduce those arms. An infantry or an artillery Regimental Tour can be conducted on the same lines, so that it is only necessary to describe a method which would be suitable for both.

It is undesirable for regimental officers to be given a good map during these exercises. They will be compelled to use a small-scale map in war, for the good reason that sufficient large-scale maps could not be carried with the field army. A map on the scale of one mile to a quarter of an inch is the best; failing this, one mile to half an inch should be used. The beautiful maps with the heights coloured on the "layer" system should be avoided; such excellent maps would rarely be available in war. It is very important that regimental officers should study the ground rather than the map, which is another reason why a small-scale map is preferable. Officers who are accustomed to use a map on a scale of 2 inches to a mile when training their men will be at a disadvantage on service where they may be compelled to use a map on a scale four or eight times smaller.

In the example given below the Ordnance map, on a scale of four miles to the inch, would be the most suitable. During the actual tactical exercises on the ground the map need not be used at all, except to ascertain the names of places, for both the director and the officers should describe their intentions by pointing out the various features in front of them, and not by referring to the map. In this manner the ground will be studied properly, and not in the perfunctory manner so often seen when a good map is available.

We will suppose that the ground west of Cashel has been found to be suitable for the operations of a small detachment (*see* Sketch No. 1), and that the scheme is based on the operations of the German detachments covering the siege of Belfort early in January 1871. A short account of these operations, covering one or two sheets of foolscap, together with a sketch, could be issued to the officers some days before the Tour commences, so that they can become acquainted with the historical example. The general idea might then take the following form:

GENERAL IDEA

See Sketches Nos. 1 and 15.

1. The situation is taken roughly from the operations round Belfort about January 6, 1871.

2. Emly is a Blue fortress with a circle of permanent works extending round the town at a radius of about two miles from the centre, and is being besieged by a Red force, believed to consist of two or three divisions. Part of this force is about 30 miles to the north-east, apparently covering the siege on that side.

3. The main Red army is 100 miles to the north-east of Emly, fully employed against the Blue army.

4. A large Blue force of three or four divisions is ad-

vancing from the east, evidently with the object of raising the siege of Belfort, and a Red force, strength unknown, has just left the main Red army, marching in a south-westerly direction.

SPECIAL IDEA, RED.

1. The Red force besieging Emly consists of the 21st infantry division, one regiment of cavalry, and a siege train. The 22nd infantry division and 17th cavalry brigade, which is covering the siege on the north-east, withdrew to Holycross (23 miles north-east of Emly) on January 6. All these troops are under the command of the G.O.C. 22nd division.

2. A detachment from the 21st division, consisting of two battalions of infantry, one section of field artillery, one troop of cavalry, and part of a field ambulance, is posted at Golden. Another detachment from the same division, consisting of one battalion of infantry and one troop of cavalry, is posted at Caher. Supplies for both these detachments are sent out every day in country carts from Tipperary, which is the headquarters of the 21st division.

3. Two Red divisions marched from the main Red army on January 6 to reinforce the Emly besieging force.

4. The General commanding the Emly force is uncertain whether the Blue force is advancing against the 22nd division or farther to the south direct on Cashel. The officers commanding the detachments at Golden and Cashel are ordered to advance on January 7 about 5 miles to the east, drive back any advanced troops of the enemy they may encounter, and endeavour to ascertain if there is any strong force of the enemy in that neighbourhood.

5. During January 6 cavalry patrols from the detach-

ment at Golden have been driven out of Cashel by hostile cavalry, but no Blue infantry or guns have been seen.

6. The Red detachment at Golden is billeted in that village, with four companies on outpost duty about a mile north-east, east, and south-east of the town, and with a company and four mounted men holding the bridge over the Suir 2½ miles north-west of Cashel.

The above general and special ideas are only intended as a general guide; the ground has not been visited, and Sketch No. 1 does not contain sufficient details to describe any tactical situation. For example, the exact position of each outpost company might be given.

Although the enemy is not represented by a party of officers, it is advisable to prepare a special idea for that side, which can be issued to the officers at the conclusion of the Tour to show them that they have received fair play throughout the operations, and that the enemy's movements have not been altered from day to day with the object of defeating their own plans.

Officers take more interest in the scheme when they know that the enemy's plan is fixed, so far as it can be, and that they will be informed ultimately as to his strength and intentions. This special idea can be drawn up in the form of a diary, and will be useful to the director himself when he gives his decisions during the course of the operations (*see* Sketch No. 15).

Special Idea, Blue.

1. The Blue force marching west on Emly consists of one cavalry brigade and three infantry divisions. The 1st division is marching along the Fethard, Cashel road, the 2nd division on Holycross, and the 3rd division along a parallel road between the two. The cavalry brigade is

employed on protective duty, covering the advance of the divisions.

2. It is the intention of the Blue commander to cross the Suir between Holycross and Golden and advance on Emly.

3. On January 6 one regiment of cavalry arrives at Cashel and the 1st division bivouacs at Fethard with its advanced guard, consisting of two battalions of infantry, a battery of artillery, a company of engineers, and a squadron of cavalry, two miles north-east of Fethard on the Cashel road.

4. The General officer commanding 1st division intends to advance on 7th, throw his advanced guard across the Suir at Golden, and bivouac at that place.

Events on January 7.—The Blue cavalry meet the Red detachment from Golden about half way between Golden and Cashel; they halt or retire, according to the action of the Red detachment. About two hours later the advanced guard of the 1st Blue division arrives. The intention of the officer commanding is to attack the southern flank of the Red detachment. The director will decide whether this is possible, and also the result of the engagement. As Blue is no stronger than Red, it is probable that the attack will fail. During the day news arrives that the 3rd Blue division is being attacked east of Holycross. The General commanding the 1st division decides to halt for the night at Cashel, with outposts to the west and north, and withdraws his advanced guard to Cashel.

Events on January 8.—The 3rd Blue division repulsed the Red attack west of Holycross on January 7, after severe fighting which continued intermittently up to 11 P.M. The Red force retired without molestation from Blue. The 2nd Blue division moved north to support the

3rd division. The 1st Blue division was ordered to secure the passage of the Suir at Golden, and also occupy the bridge two miles north-west of Cashel.

The General commanding 1st division sent one infantry brigade, one field artillery brigade, and one squadron to the bridge north-west of Cashel, and a similar force to Golden; the remainder of the division was kept in reserve at Cashel, ready to reinforce either brigade. (This was bad tactics on the part of the G.O.C. 1st division, but it is hardly fair on the other side to make him do everything right.) The officer commanding the Red detachment at Golden was ordered to delay the enemy as long as possible, and he occupied a defensive position facing east about 1½ mile east of Golden. (If he wishes to occupy some other position, this must be altered.) The Blue detachment marching to Cashel encountered this Red force. The Red outposts were driven back, and the Blue commander was about to attack when an order arrived stating that the 1st division was not to advance farther till the 2nd and 3rd divisions had crossed the Suir and gained ground to the south-west. The Blue detachment remained in contact with the Red detachment.

Events on January 9.—The 22nd Red division crossed the Multeen river during the day and occupied a defensive position facing east near Tipperary. The Red detachment east of Golden was ordered to retire through that place, destroy the bridge, and fall back on Bansha. The Red detachment at Caher was ordered to destroy the Suir bridges at that place and also the bridges over the Ara as far as Bansha, and join the Golden detachment at the latter place.

It will be seen from the above that the tactical exercises for the officers will be as follows:

January 7.—An advance from Golden to Cashel, includ-

ing the action of a small advanced guard, subsequently supported by the rest of the detachment, *vide* Chapter XVIII., B—The Action of an Advanced Guard.

January 8.—The selection and defence of a position east of Golden, covering the Suir bridge, *vide* Chapter XVIII., E—The Defence.

January 9.—The retreat of the Red detachment over the Suir at Golden, the destruction of the bridge, and the subsequent action on the right bank of the river, *vide* Chapter XVIII., C—The Action of a Rear-Guard.

All these exercises will be over different ground, they will each be of a different nature, small forces will be employed on both sides, and great attention can be paid to the action of single companies of infantry and to the two guns.

The director can make any alterations that are necessary owing to the unforeseen action of the officer commanding the Red detachment at Golden, but he should not change the general intentions of the Blue commander. For example, the officer commanding the Red detachment might decide to retire behind the Suir on the evening of 7th, and occupy a defensive position on the right bank on 8th. This would rather spoil the exercise, because the retirement across the Suir on 9th could not be carried out. If this occurs it would be best for the director to send an order to the O.C. Golden detachment from the General commanding 22nd division directing him to cover the bridge by defending a position on the left bank as long as possible.

If suitable accommodation can be obtained, the officers can assemble at Cashel about 5 P.M. on January 6, when the general and special ideas could be issued if they have not been issued beforehand. The officers could be directed to work in pairs—a senior officer with a junior officer—and write an appreciation of the situation (*vide* Chapter XIV.,

A), together with the orders for the advance of the Golden detachment on 7th.

The appreciation of the situation would deal chiefly with the ground between Golden and Cashel, so far as its features could be ascertained from the map. The officers would be given the quarter-inch Ordnance map, and could decide which were the important points to make for during the advance and which flank of the detachment would be most exposed. For example, on the above map there is a hill, marked 434, 1¼ mile south-west of Cashel; there is also a stream running west from Cashel to the Suir, with only one crossing. This stream with the Suir would protect the northern flank of the detachment, so that the chief anxiety of the officer commanding during the advance would be to guard his southern flank and avoid being cut off from Golden.

After passing through Cashel the detachment would be very exposed, as there are several roads from the north, north-east, and south-east converging on the town, and the enemy might advance in strength along any one of them. For this reason it is probable that the officer commanding the detachment would be unwilling to advance more than a mile east of Cashel. The action of the detachment from Caher would not be of any assistance to the Golden detachment, because they also are ordered to move about 5 miles eastwards, and Caher is 10 miles south of Cashel. If the Golden detachment is to halt on the night of 7th–8th at Cashel, the supplies from Tipperary must be brought in to Cashel. This requirement will raise the question as to when these supplies can safely leave Golden; in any case, some arrangements and orders will be necessary.

The above is sufficient to show the main points of the appreciation, which can be worked out on the lines indicated in Chapter XIV., A. The director could hold a

conference in the evening and explain those principles of Combined Training which deal with marches and advanced guards, and pick out the important points which would be likely to bear on the operations next day. The officers might be asked to read out their orders, and these could also be discussed. It would be best to keep the appreciations for discussion at the conference on the evening of the next day, so that the director will have plenty of time to look them over.

On the morning of January 7 the officers would proceed from Cashel to Golden and commence the exercise. The various situations would have been prepared beforehand by the director in the manner suggested in Chapter XVIII., B—The Action of an Advanced Guard—and the exercise would be carried out as described in that chapter. Particular attention would be paid to company leading, and the advance of one or more companies to attack and drive back the enemy should be followed on the ground. An example of the method of conducting an exercise of this nature with very small forces is given in Chapter XX.

At the close of the exercise the officers would return to Cashel, and a narrative of events up to 5 P.M. on 7th could be issued. This narrative is of no great importance as regards the conduct of the various tactical exercises, but it keeps officers informed of the general progress of events, and affords them a good idea of the strategical and tactical situation. The narrative might be as follows:

Narrative of Events up to 5 P.M. *on January* 7.

1. About 11 A.M. on 7th the General commanding 22nd division discovered that a Blue column was advancing west on Holycross. The 22nd division attacked this column with some success, but about 4 P.M. the enemy received strong reinforcements, and the 22nd division commenced to retire across the Suir at Holycross.

2. The detachment at Caher report that they have seen no signs of the enemy, but inhabitants state that a large force of all arms was billeted in Fethard and the surrounding villages last night.

3. The Golden detachment is now occupying a position about ——, facing east; the outposts report that the enemy in front of them are withdrawing eastwards.

During the evening the officers would be employed in writing out the notes they had made on the ground during the day. The director would collect the work done by each officer on the ground, examine and criticise it, and extract notes for the conference, which would be held about 9 P.M. The director would also examine the appreciations of the situation written the previous evening. For notes on the criticism of work and method of conducting conferences, *see* Chapter XIII.

On January 8 the officers would go out to select and defend a position facing east covering Golden. The method of conducting this exercise is described in Chapter XVIII., E—The Defence. The work in the evening would be the same as before, and the following narrative might be issued at 5 P.M.:

Narrative of events up to 5 P.M. *on January* 8.

1. The 22nd division drew off from Holycross during the day, covered by a strong rear-guard, and occupied a position on the left bank of the Multeen river, facing north-east. About 5 P.M. Blue troops forced the passage of the Suir, south of Holycross, and occupied ground on the right bank facing south-west, in contact with the Red rear-guard.

2. The detachment at Caher reported that no enemy were in the neighbourhood of that place.

3. The Golden detachment occupied a position facing

east near ——. During the morning the Red outposts covering this position were driven back, and it appeared that a heavy attack was about to be delivered by the enemy. The officer commanding the Golden detachment made all preparations to retire, but no attack was made by Blue, and the Red detachment maintained its position in contact with Blue outposts.

On January 9, the last day of the Tour, the officers would carry out the retreat of the Golden detachment across the Suir. The director could conduct the exercise in the manner suggested in Chapter XVIII., C, paying particular attention to the action of the rear companies and the support afforded by the section of artillery. It would be necessary for the latter to avoid losing its power of movement, and therefore positions should be selected where the guns could be run back to cover by hand, or where the teams could limber up without being unduly exposed to hostile artillery or infantry fire.

Officers have a somewhat exaggerated idea of the rapidity with which bridges can be destroyed, so it would be advisable to halt at Golden and work out the time required and the materials necessary to destroy the bridge at that place.

In the above examples no administrative problems are given, but if it was desired to exercise the officers in such work, suggestions will be found in Chapters XI. and XVI. Schemes of this nature for regimental officers should be confined to work they would be likely to be called upon to perform in war, such as the preparation of a bivouac for a small force. Elaborate railway or supply schemes should be avoided, though it would be within the province of a regimental officer to go out with an escort, collect and bring in supplies and local transport.

Whatever work is decided upon, the whole party of officers should work together under the director. They gain far more instruction in this manner than when they are sent out by themselves to reconnoitre country or carry out any kind of tactical exercise. They hear each other's views on every question, they have the advantage of the director's decision on every matter which is discussed, and finally they learn a great deal by arguing amongst themselves when they have finished one situation and are walking to the place where the next situation is to be issued.

Probably the best and cheapest method of getting officers on to the ground each day is to hire a break, and let the officers walk back in the afternoon. If the locality is well selected all the work should be within four or five miles of the place where the officers are staying. If it is beyond that distance a break will be required to bring the officers back again. Bicycles can be used, but they are generally a source of trouble during the progress of the exercise. The director wishes to move forward and study the line of attack by a company over fields or rough ground; the bicycles are left behind, and then the officers have to go back and get them, which is a waste of time. Frequently the railway can be used, and that is the best of all, because there is no doubt that, except when there are no fences and crops to be destroyed, and horses can be used, it is best to do the whole of the exercise on foot, unencumbered by bicycles or anything else.

CHAPTER XVIII

SUGGESTIONS FOR CONDUCTING TACTICAL EXERCISES ON THE GROUND DURING A STAFF RIDE, A REGIMENTAL TOUR, OR AS A SINGLE EXERCISE, UNDER THE SUB-HEADINGS:

A. Outposts.
B. The Action of an Advanced Guard.
C. The Action of a Rear-Guard.
D. The Attack.
E. The Defence.

It is much easier to demonstrate on the ground the manner of conducting these exercises than it is to describe it on paper. The following attempt, however, will bring to light some of the limitations of the exercise, the difficulties to be overcome, and the general method of going to work. The system suggested here is the result of considerable experience, and has been arrived at after trying several other methods, some of which are discussed below.

The first difficulty, no doubt, is to gain sufficient self-confidence to perform the *rôle* of director or instructor, and that, of course, can only be obtained by a thorough knowledge of the principles of tactics laid down in the various official books of training, and by a certain amount of practice and experience. Every decision which is given, and every argument which is used, should be supported by some principle laid down in Cavalry, Infantry, Artillery, or

Combined Training. If this precept is adhered to, the instructor will not be giving his own views on the situation, but will be imparting the carefully thought out instructions of the highest military authorities.

If Combined Training lays down a certain principle, we may accept it as better than any of our own manufacture. The only difficulty is the application of the principle: no book can tell us how to apply the principles of war, because the application depends upon the situation at the moment and the nature of the ground. Situations and ground change so constantly that it would be impossible to lay down rules which could be applied in all cases.

It is important, therefore, that the instructor should be well acquainted with the principles of security of attack and defence which are laid down in the official books of training. He will then be able to deal with the many arguments which will be brought forward by officers during these exercises to justify their suggestions and incidentally to prove that their methods are right and the instructor's criticisms are wrong.

After a little experience the instructor will find that it is not so difficult to produce a series of interesting tactical situations and to dictate sound tactical methods of dealing with them. Even if the instruction is not very high class, officers must always learn a good deal by working out a situation on the ground.

These exercises have sometimes been described as tactical war games transferred from the map to the ground. But there is a radical difference between the two. In a war game the troops are actually represented by pieces of lead, and they can be moved about on the map. It is possible, therefore, in a war game to practise the actual movement of troops as at manœuvres or in war. The actual movement of troops cannot be practised during a Staff Ride, except by a system of flags, and it will be shown below

that this method is unsatisfactory. A Staff Ride, and the tactical exercises during a Staff Ride, are intended for the training of commanders and staff officers. Though some of these military officials actually give the executive orders for the troops to move, that is only a small part of their work; they must also make administrative arrangements, reconnoitre ground, prepare orders, and in fact do everything which is required *before* the troops move. Another difference between these exercises and war games on a map is that with the latter the commander can see where every man of his force has got to, and he certainly cannot see this in war, neither can he during a tactical exercise, because there are no troops. He is compelled to use his imagination either in a tactical exercise or in war, because when he is examining the ground he must decide on the course of action before the troops even deploy for battle, although he may be only commanding a company.

These exercises are subject to certain limitations which it is as well to bear in mind. As will be explained later, they should be carried out on foot; it is undesirable, therefore, to attempt to deal with the operations of a very large force. When such a force is employed for the Staff Ride, the tactical exercise on the ground should be limited to the study of a small part of that force, such as a brigade with some artillery attached to it, or a division. A purely cavalry or artillery exercise must be conducted in a somewhat different manner, and is dealt with in Chapter XIX.

As the officers are on foot, and as a good deal of time will be taken up in solving the various situations which are presented for their consideration, it is advisable to limit the distance which has to be traversed during the exercise.

Attempts have been made in the past to carry out the attack of a large force by placing commanders and staff officers of divisions, &c., in the exact position on the

ground which they would occupy if the troops were present, and maintaining communication by means of cyclists. The commander of the whole force is placed in a central position in rear, and he issues, or has issued beforehand, his operation orders for the attack. The various divisional commanders, each supervised by an assistant director, then issue their orders for the attack, and the infantry brigade, artillery, and cavalry commanders, each posted in a position occupied by his troops, issue their orders. It is probable that the chief lesson to be learnt from this method of conducting the exercise is that orders take a very long time to filter down from the chief commander to his subordinates, and this can be learnt much better at manœuvres, when the troops are actually present.

The result of this system is that many officers are waiting a long time for their orders, and when they receive them there is perhaps nothing for their particular brigade to do. It is really an attempt to carry out on the ground the actual movements of troops when the troops are not there. This can be done to some extent in a war game on a map, as already pointed out, but it cannot be carried out satisfactorily during a tactical exercise on the ground.

Attempts have also been made to employ flags on the ground, just as the pieces of lead are used on the map. This again is unsatisfactory, because considerable numbers of men are required to carry the flags, a great deal of running about is necessary in order to tell them where to go, and directly they begin to move they are usually lost sight of.

It is possible to flag out a defensive position which is stationary, but if the tactical exercise involves any movement of troops, flags are useless, unless there is a regularly constituted skeleton force, each company, squadron, and battery commanded by at least a non-commissioned officer, and each larger unit by an officer. Frequent opportu-

nities occur for practising this type of exercise during brigade and divisional training, and even then no one appears to think that the officers with the skeleton force derive much instruction from the operations; it is really only employed in order to afford instruction to the properly constituted force on the opposing side.

Another method which has been tried, without much success, is to collect the officers of two opposing sides, one side defending a position and the other attacking it. The meeting-place selected is generally on the defensive position itself. The officers on each side are kept apart from the others, the situation is given out, and the officers on each side are asked separately what they propose to do. The director then decides what is the result of this first operation, and a new situation is given out.

There are serious drawbacks to this method. The officers on the defending side naturally say their troops will remain where they are, still defending the position. The officers on the attacking side having failed, perhaps, to carry the position with their first attack, decide to make another attack from a different direction over ground which cannot be seen from the place where the officers are assembled. The whole party must then walk over to this new ground, and it is probably discovered that owing to some physical obstacle, such as a large wood, or a stream, an attack on this side is out of the question. Exercises conducted in this manner do not involve that close study of ground which is the chief merit of this system of instruction.

Another system which has been tried, but which appears to have been the least successful of all, is for each side to be represented by a party of officers under an assistant director, and to be posted in the position which would probably be occupied by the two opposing commanders in war. The director then remains in the middle and

receives from each side the solutions arrived at, and decides the course of action. The director is not on the spot; he cannot ascertain from a hurriedly written report what are the full intentions of each commander, and he probably gives decisions which are not accepted without demur. It takes a long time to transmit the messages, and after the first situation the director usually adopts the method described above, and brings the officers on both sides to some central place where a view of the country can be obtained.

If we cannot have the enemy represented either by flags or by a party of officers, we must adopt some other method. The only satisfactory solution hitherto arrived at is to make the director or instructor represent the enemy. He knows the original orders and intentions of each of the opposing commanders, and he must decide from time to time, as the various situations develop, what the enemy would be likely to do, and give the necessary decisions, in the same way as he prepares the evening narrative.

It is sometimes urged that these tactical exercises on the ground impose an undue strain on the imagination of officers, because the enemy cannot be seen. This is true to some extent, not because the enemy is invisible, but because there are no bullets and shells flying about. It is rare that the enemy is visible in war, and officers dealing with tactical situations in front of the enemy have only the ground, their orders, and their general knowledge of the situation to guide them as to what they are to do. The shells and bullets are of course disconcerting, but they cannot be produced at any peace exercises, so it appears that these tactical operations without troops approach sufficiently close to the actual conditions of war to be worthy of study and elaboration. In some respects they are even better than manœuvres, because each officer is

called upon to say how he would solve the problem, probably no two officers agree, an extremely instructive discussion follows, and the director finally states what he considers to be the correct solution.

Though motor-cars, or other means of conveyance, are useful to take the officers on to the ground where the exercise is to be held, and to bring them back in the evening, it is essential that the work during the day should be done on foot. Officers can get about anywhere on foot and follow the movements of an attacking force, or walk along a defensive position. Horses no doubt would be better, especially as regards the selection of artillery positions, and in some parts of the Empire, where there are no hotels and where a camp is formed, the exercise could be done better on horseback than on foot. But in England, as already pointed out, horses are very expensive to take on a Staff Ride: there is usually a good deal of work on the hard road to get to the required place of assembly, and a collection of several officers with horses and without horse-holders causes confusion and disturbance during the conferences and detracts from the value of the instruction imparted. The attention of each officer is constantly distracted from the exercise to his horse, which is probably kicking some one else's, and altogether it appears to be better to do without them. In many places horses could not get about, or if they could, would damage fences and crops, whereas a few officers can go almost anywhere without interfering with game, crops, or the owner's peace of mind.

It appears, therefore, that the only satisfactory method of conducting these exercises is to limit the work to the operations of one side, all information about what the enemy is doing, so far as it would be available in war, being provided by the director. Secondly, that only a small portion of the force actually engaged should be dealt

with during the exercise, orders from higher commanders being supplied by the director as occasion demands. Thirdly, that the exercise should be conducted on foot.

There are a few matters of detail in the conduct of these exercises which apply to them all, and which can be recorded here to avoid repetition. They are drawn up on the supposition that the tactical exercise is held during a Staff Ride, but they apply equally to Regimental Tours or to a "one day" regimental exercise on the ground.

(*a*) The orders which are issued to the commander of the troops which are selected for the exercise should have been prepared the night before, and a copy posted up in the officer's room. For example, if it is proposed to carry out the attack of a brigade, all the officers should have seen the divisional orders directing the attack, and a copy should be taken on to the ground.

(*b*) If possible, the various situations which it is intended to work out should be typed and duplicated beforehand, so that a copy can be issued to each officer as the exercise progresses. These situations would be numbered, and the first situation issued at the place of assembly.

(*c*) The ordinary procedure is to issue the first situation, tell the officers to examine the ground, to write down in their note-books what they propose to do, and to meet the director at some spot which he will indicate where a good view of the ground can be obtained.

(*d*) If there is a large number of officers taking part in the exercise, it is best to divide them into parties of two or three, officers of different arms working together. Each party would then send in one solution. If they do not agree, the alternative suggestions can be inserted. This method facilitates the rapid discussion of each situation, and reduces the amount of work to be looked over by the directing staff in the evening.

(*e*) From half an hour to one hour should be allowed

for the study of each situation, the time being decided by the simplicity or otherwise of the situation and by the nature of the ground.

(*f*) When the officers reassemble, the director can ask one officer to explain his or his party's views regarding the solution of the problem. He can criticise any small point, but it is better not to bias the opinions of others by criticising any important matter. If it is plain that the officer has made a serious mistake, a few questions may be asked to make sure that he really means what he suggests, and has appreciated the results which would be likely to follow in war. The remaining officers will be asked in a similar manner to give their solutions, and the director will then criticise any doubtful suggestion, indicating the impracticability or danger of adopting such a course, and will state what his own solution would be.

(*g*) Having completed the first situation, the officers should be taken to a place where they can see the ground where the second problem is to be worked out. It is best not to issue the second situation until this ground is reached. The officers meanwhile will be discussing amongst themselves the points which have been raised at the first conference, and gaining valuable instruction thereby.

(*h*) The remaining situations will be dealt with in a similar manner. Three or four situations are quite as many as can be got through in one day. Including the discussion, each situation will average about one and a half hours, and four to five hours' hard work on the ground is as much as can be undertaken with advantage, especially if it is raining.

(*i*) At the close of the exercise the officers should be asked to hand in their notes. The director will study these during the evening, and bring forward at the conference at night all the important points which have been discussed on the ground. If any long discussion

takes place on the ground, it is best for the director to inform the officers that they will have another opportunity of expressing their views at the evening conference.

(*j*) The best manner of conducting the conferences on the ground is to raise a point, deal with it as thoroughly and briefly as possible, and then pass on to the next point. Officers get rather tired of long discussions on one subject, and the chief art in conducting these exercises is to maintain their interest by raising a succession of instructive subjects which bear directly on the work in hand.

(*k*) It should be clearly understood that these exercises are for training in command rather than in staff work, though no doubt a good deal of staff work can be dealt with whilst solving the various problems. For this reason, provided the forces employed are small, the exercises are peculiarly suited to the training of regimental officers, and consequently form the chief basis of Regimental Tours, which are dealt with in Chapter XVII.

(*l*) Officers should be told to study the ground and not their maps; exercises with maps can be carried out indoors, and they are not so instructive as exercises on the ground. During the conferences also officers should explain their proposals by indicating places on the ground and not on the maps. The maps available for the majority of officers in war are on too small a scale to be of much tactical utility, and consequently they, regimental officers especially, should be trained to studying the ground more than the map, so that when they go to war they will not be upset by the fact that there is no good map of the district available.

The preparation of the various situations requires careful thought, and a close study beforehand of the map, or better still, of the ground itself. If we wish to follow the action of a small force such as a brigade, or at the outside a division, the scene of operations should be over

ground where difficulties are likely to arise, where the features are not very large, and where a number of important tactical localities can be found, the possession of which is certain to be disputed with the greatest energy by both combatants.

Open rolling downs, large features, flat plains, very enclosed country, and the neighbourhood of large towns with many villas and gardens are unsuitable for these exercises. The country which lends itself best to the solution of instructive problems consists of small hills, broken ground, with woods here and there to give cover to deployments and to render artillery action difficult, with several tactical points which will form the various stepping-stones to success—villages, farms, &c.

In very open country it is difficult to prepare a series of situations, especially when practising the attack, which is the most difficult operation to conduct during a tactical exercise. The preliminary arrangements can be made, positions for the artillery can be selected, and objectives given to the various bodies of infantry. The attack then goes forward in a succession of extended lines, and everything depends on the method of advance, the *moral* and good shooting of the troops, and the combination of artillery, infantry, and cavalry action—details which cannot be practised during these exercises. So we see that when the first situation has been dealt with, though it is a very interesting situation, there is nothing more to do. With senior officers on a large Staff Ride it would be very instructive to work out such a situation for a large force, and it might take a whole day to do it, but for an ordinary Staff Ride with a smaller force it is more instructive to prepare several situations, and for this the ground must be suitable.

It is therefore desirable to select the operations of the particular brigade or division, where the ground appears

to be favourable, to take out all the officers on one side, and work out the details of the proposed scheme. The preparation of the various situations depends entirely on the nature of the operation, but the following system has been found to be suitable in most cases :

The actual tactical situation at the commencement of the exercise should be based entirely on the orders and staff arrangements made by the officers the night before. These orders should be taken on to the ground, and any mistakes or omissions which come to light during the operations should be brought to notice by the director. In a "one day" regimental exercise the information contained in these orders would be given in the scheme, *see* Chapter XX. The first situation should commence where the orders left off. That is to say, if the troops were in bivouac the orders for the movement out of the bivouac to carry out their instructions would be the first situation. As a rule, however, it is best to get these orders written the night before, and commence the first situation when the troops are moving forward or when they have reached some place of assembly indicated in the orders.

The director when preparing the situation will know what steps the enemy has taken, or is about to take, to carry out his own plan. It is easy then for him to state in the first situation the details of any opposition which has been met with so far, and to describe where hostile fire is coming from. In the second and third situations the director does not know what the enemy will do, and he must invent the movements very much in the same manner as he does when he is preparing a narrative. The director's knowledge of the general intentions of the opposing commander will give him sufficient data to work on if assisted by some imagination. When the enemy is not represented by a party of officers, the director must decide throughout the intentions and actions of the enemy.

We may assume that the first situation has been dealt with and has resulted in success or failure, which involves a forward or backward movement on to fresh ground. The second situation can then be prepared, and finally the third situation. Further details regarding the preparation of these situations beforehand will be found under the various headings below.

There are five distinct classes of military operations which can be practised in this manner:

(A) Outposts.
(B) The action of an advanced guard.
(C) The action of a rear-guard.
(D) The attack.
(E) The defence.

Each one of these will be taken separately, and it will be assumed that in cases (A), (C), and (D) the ground has been reconnoitred by the officers beforehand, though this is not always necessary; that in every case the general situation is known to the officers, and that the necessary orders have been written the evening before. This is required so that everything may be ready to commence the exercise directly the officers assemble on the ground.

Sketch No. 1 should be referred to for all the examples given in this chapter.

(A) Outposts.

The best method of conducting this exercise is to assume that each officer or each group in the party is in the position of the officer commanding a section of the outpost line. The orders of the outpost commander, which would have been prepared the previous evening, usually after a reconnaissance of the ground, would be issued or dictated to all officers before coming out. The officers would meet the director on one flank of the particular outpost section that it was proposed to study, and the first point to consider would be whether the orders were

sufficiently comprehensive so that the officer commanding the section of the outpost line would know what to do.

The director would then point out to the officers the exact position of the nearest outposts beyond the limits of their section. He would ask them to walk over the ground in the vicinity and decide how the first outpost company should be placed, the exact positions of the sentries, picquets, and supports, if any, and to write down the details in their note-books. They would be ordered to meet the director in half an hour at some convenient spot close by, where a fair view could be obtained of the ground in front. The director would also go over the ground and decide how the outpost company should be disposed. When the officers have reassembled the director can discuss the work, as suggested in (*f*), p. 381.

The party will then walk along the outpost line till it is necessary to post a second company, and the same procedure will be followed. In this manner the outpost section will be completely occupied, and it will then become necessary to write the orders of the officer commanding the section. The most important point about these orders, apart from the position of the various outpost companies, is what their commanders are to do in case they are attacked. In fact, the orders by the officers commanding a section of the outpost line should disclose a scheme of operations to meet an attack either against the right, left, or centre of his section. These orders having been written and discussed, the director might take the officers to the locality where one of the outpost companies had been placed, and issue the first situation. As an example, this situation might take the following form:

TACTICAL EXERCISE ON THE GROUND.

Situation No. I.

1. At 4 A.M. on June 17 the non-commissioned officer in charge of a patrol sent forward to the wood at ——

reports that he heard troops moving in front. At 4.15 A.M. the sentries opened fire on some troops advancing from ——.

2. At 4.30 A.M. hostile rifle-fire was opened on the picquet from ——, ——, and —— (naming any localities which the enemy would be likely to occupy if he was advancing to drive back the outposts).

3. As officer commanding the outpost company at ——, state what you propose to do.

Having dealt with the situation as suggested in (*e*) and (*f*), pp. 380–381, and having moved to fresh ground, if necessary, the second situation can be issued. This might be as follows:

Situation No. II.

1. The hostile attack has developed sufficiently to show the officer commanding the outpost company that unless he retires at once he will be cut off.

2. Hostile fire is now coming from —— and —— (naming places which threaten the line of retreat of the company).

3. As officer commanding the outpost company, state what you intend to do.

If a third situation is required, the exercise might be transferred from the outpost company to the whole section of the outpost line, and the following problem issued:

Situation No. III.

1. The outpost companies at —— and —— have been driven back, and are now holding positions about —— and ——. The remainder of the companies are maintaining their original position, but are also being attacked. Other sections of the outpost line have been disturbed, but not heavily attacked.

2. As officer commanding this section, state what you propose to do.

There would not be time in one day to go round the outpost line and work out all the above situations as well. But they may be useful to explain the class of work. With senior officers the dispositions of the outposts might be decided, and then the third situation worked out. With junior officers, especially during a Regimental Tour, the dispositions might be settled, and then the first and second situations dealt with.

Another form of exercise, with senior officers, is to take out a party to represent the officer commanding the whole of the outpost line. The officers would then be given the orders issued by the commander of the force to the officer commanding the outposts. In these orders the officer commanding the outposts would be directed either to select himself the best line for the outposts, or would be given a general line to occupy. The main object of the exercise would be to decide the line of observation and of resistance. In a scheme of this nature the locality of the troops that are to find the outposts should be given, so that the officers may first decide how they are to be brought out on to the ground and distributed to various parts of the line without delay.

There are three stages in the establishment of an outpost line. First, the commander must decide on the general line and allot sections to various troops. Secondly, he must issue orders to bring the troops on to the ground behind their respective sections. Thirdly, the officer commanding each section must decide where each outpost company is to go to. As far as possible these three things should be going on at the same time. For example, it is not difficult for the officer commanding the outposts to obtain from the map a rough idea of the number of companies he

will require to occupy the line. He can tell these companies to go out to certain places of assembly, and then they will be close at hand when they are required by the officer commanding the section they belong to.

It may be useful to note a few of the mistakes which are made sometimes by officers when carrying out these exercises, mistakes which are entirely opposed to the teaching of Combined Training.

There appears to be a desire to occupy a sort of defensive position, and to hold every piece of ground which cannot be seen by the picquet on the right and left of it. Officers do not always realise that an outpost position occupied in this manner would use up far more men than are available. They do not always understand that the important tactical points along the outpost line must be held, and the rest merely watched or patrolled. These tactical points are readily recognised if we place ourselves in the position of the enemy and ask the question, What point should we capture first before we push troops along that road or up that valley? If these tactical points are held, the enemy cannot go between without attacking them heavily, and in real war he will rarely go between them till he has captured them. In either case these operations will take some time, and to gain time is the chief duty of the outposts.

Sometimes we find that the officers are so absorbed in protecting the bivouac that they forget to protect the only position on which the troops who are occupying the bivouac can fight. As explained in Combined Training, outposts are required to cover the fighting position more than the bivouac, because the former includes the latter. Sometimes, no doubt, the outposts can be placed on this fighting position, but if they are attacked and driven off it before the troops in bivouac can arrive, the latter will be surprised at an awkward moment.

In all outpost exercises the officers should be told three

third regiment, with the horse artillery, &c., would be in reserve on the Cashel, Caher road. Owing to the Suir and the mountains on the west flank, the Red cavalry brigade, when driven on to its own infantry by the Blue advance, is certain to concentrate on the eastern flank. From notes such as these the director can decide the course of action taken by the enemy during the day, and can select the exact places where hostile fire is coming from.

The third situation would be more serious for the officer commanding the Blue advanced guard. If he has been wise during the earlier skirmishes, and has not employed more troops than were absolutely necessary, he will still possess a powerful force, quite capable of attacking anything but the enemy's main position. In European warfare it is a good rule for an advanced guard commander to mark on his map the position of his own troops at the moment when his cavalry are first stopped. If he folds the map at the point of contact he can then mark off the corresponding localities where the enemy's troops are likely to be. The cavalry will be some distance ahead of the infantry, and the advanced detachments of infantry will be echeloned back in ever-increasing strength till the enemy's main body is reached. If he knows whether the enemy is likely to be advancing, retiring, or halted, he can make a rough calculation of where he is likely to meet with serious resistance. This knowledge, added to the appearance of the ground in front, which is or is not suitable for occupation as a main defensive position, will tell him a good deal regarding the resistance that may be anticipated. If the enemy is advancing, his echelon of troops will be closing up and resistance will increase rapidly; if he is retiring, this will not be the case; if he is halted, the resistance will increase more slowly. Taking these points into consideration, the officer commanding

the advanced guard can deal with the third situation which is suggested below.

Situation No. III.

1. The enemy were driven from their position at H, and also fell back from L and M. The cavalry regiment advancing from Rosegreen report that they are engaging a hostile force about O, and are not making much progress. Blue cavalry patrols on the west report that the ground is clear as far as the Suir. The Blue advanced guard lost seventeen men in the attack on H.

2. The advanced guard again moved forward, and when the van-guard reached Q they overtook the cavalry, who were everywhere stopped on the line R, S, T, and hostile artillery, probably a battery, had opened fire from the direction of R.

3. The officer commanding the advanced guard rides forward to Q to reconnoitre. The exact position where the hostile fire is coming from and the localities reached by the troops of the Blue advanced guard will be indicated by the director on the ground.

4. As officer commanding the advanced guard, state what you propose to do.

In this situation the first object of the officer commanding the advanced guard would be to endeavour to ascertain if the ground in front was occupied by the enemy's main force. The absence of any serious artillery fire, the resistance previously encountered, the features of the ground in front, and the nature of the situation would probably suggest that the hostile force in front consisted still of the enemy's advanced troops.

If this was the case it would be the duty of the officer commanding the advanced guard to carry out his original instructions, which were to drive back the enemy's advanced

troops and endeavour to locate his main position. If there is any high ground in the vicinity it might be possible to see beyond the line at present occupied by the enemy, and discover if there is any position in rear where his main body might be expected to be preparing for battle.

The nature of the previous operations would have disclosed the fact that the enemy does not appear to be either advancing or retiring, so he is probably halted. In that case he will be covered by infantry outposts, which must be driven back; his cavalry will have cleared the front, and may be expected shortly to act with considerable vigour against one or both flanks of the advanced guard. The position and action of the cavalry attached to the advanced guard will therefore be a matter of important consideration.

The chief difficulty in a situation of this nature is to protect the flanks of the advanced guard, so that the officer commanding will first select the objective of his attack and then secure his flanks by the occupation of all important tactical localities in the vicinity, and thus secure not only his own safety, but that of the main body in rear.

As regards the conduct of the attack, the points brought forward when dealing with the second situation will again appear, but as the ground is different, and the situation is more serious, the methods adopted for the attack will also vary. The action of the artillery will be more important than in the second situation, and as the possible movements of the enemy are quite unknown, the advanced guard commander, when disposing his artillery and making his arrangements for attack, will also consider the question of defence, in case a heavy attack is suddenly launched against him.

As in the other situations, messages must be sent to the detached cavalry regiment and to the General commanding the main body. The question whether the latter should

now be with the advanced guard, so as to be ready to reconnoitre directly the enemy's advanced troops are driven back, and whether, if he is present, he ought to conduct the operations himself, can be again discussed. It will be found, whatever the situation or the ground may be like, that this exercise will be most instructive from the point of view of command.

It will be noted in all the above operations that no attempt is made to fight out the battle; all these schemes are useful only so far as deciding what to do. There is, however, no objection to dealing with the action of small units, such as companies, batteries, or squadrons, the officers being asked, if they were commanding the leading company, how they would act and what orders they would give to their men. This is further dealt with in Chapter XX.

The final stage of the above scheme would be the action of the advanced guard after driving back the enemy's outposts and discovering his main position. There would not be time in one day to deal with this situation, but the chief points would be to occupy as good a defensive position as was available on a somewhat wider front than would ordinarily be employed, to pay great attention to the protection of the flanks, to preserve the mobility of artillery by avoiding undue exposure, and be prepared for a heavy attack. As it is probable that the advanced guard will be required to remain in this position for some time, staff arrangements will be necessary to provide food and water for the men and horses, to replace expended ammunition, and to arrange for the wounded. The engineers would, of course, be very busy assisting in the defensive arrangements.

(C) The Action of a Rear-Guard.

There is a certain sameness about the various situations which can be produced for an exercise in the action of a rear-guard. The ground in each situation is different, but

the only other change that can be made is in the vigour of the enemy's attack.

For example, the first position which is taken up by a rear-guard, after an unsuccessful fight, must be held longer, as a rule, than the subsequent positions, because when once the defeated army has got well away along the roads, and has gained some semblance of organisation, the march continues uninterruptedly, unless some obstacle has to be crossed.

Two situations would probably be sufficient for one day's work, the first situation being produced close to the battle-field, perhaps under hostile artillery fire, and subject to both artillery and infantry attack. The second situation would be farther back, where the rear-guard would be exposed to an attack from cavalry and horse artillery only.

The situations which can be produced in this exercise are of three distinct types:

1. The staff arrangements made during a battle in case things go wrong.

2. The organisation of a rear-guard when the troops are being driven back; the occupation and defence of the position selected in the first situation.

3. The retreat from the first position to another in rear, and the occupation and defence of the latter.

The first situation involves so many considerations regarding the course of the action, the direction of the line of retreat, the nature of the attack, and the reserves that are likely to be available, that it is difficult to give an example without going into many details to explain the situation.

In a battle fought out to the end there should be theoretically no reserve left, or perhaps the last reserve might have been thrown into the fight to secure some important tactical point and thus enable the remainder of the army to get away. The first rear-guard position is then on the battle-field itself, and that is what usually happens when

an army is driven from the field. The troops occupying this position would, however, rarely form the properly constituted rear-guard. Commanders and staff officers would organise a rear-guard from the troops that were retiring, collecting any complete battalions and batteries that they could find. These would immediately occupy the first actual rear-guard position, and allow the troops still on the original position to fall back behind them.

The selection of this position during a battle would not be easy, because it would be uncertain what part of the defensive position would give way first. Probably two or three alternative positions would be selected and reconnoitred. The following example, therefore, must not be taken to apply to all cases; in fact, the situation produced might be described as abnormal, and it is only selected because the necessary details have already been given in Chapters V. and XII.

We will suppose that the General commanding the 8th Red division in the Tipperary scheme has decided to retire across the Suir if heavily attacked by a superior force on June 17, and to endeavour to draw the Blue force after him. That the Blue detached force delivered this attack, the main blow being directed against the Red eastern flank. In this case the Red commander would have at least one brigade and plenty of artillery available to form a rear-guard, because, directly he had offered sufficient resistance to make Blue show his strength, he would be anxious to get away. The first situation would, therefore, be quite a simple one, the main difficulty being to prevent the wounded on the main position falling into the hands of the enemy. The director would go over the ground beforehand and select suitable positions for the rear-guard to hold during the retirement. The officers could be assembled on the original position and given the first situation, which might take the following form:

TACTICAL EXERCISE ON THE GROUND.

The action of a rear-guard.

RED.

Situation No. I.

1. The distribution of the troops on the defensive position occupied by the Red force will be found in the operation orders issued last night.

2. At 4 A.M. the Blue force advanced against the front of the position, and at 5 A.M. a heavy attack developed against the eastern flank. It was apparent that the enemy were superior in strength to Blue, and the Red commander decided to carry out his original intention and withdraw across the Suir through Caher.

3. The 24th brigade with one field artillery brigade attached is ordered to select and occupy a rear-guard position north of Caher to cover the retreat of the remainder of the Red force. The cavalry brigade have been directed to guard the eastern flank of the rear-guard and eventually retire on Ardfinnan.

4. As G.O.C. 24th brigade, decide what position you would take up, how you would occupy it, and what arrangements you would make for the retirement of the 22nd brigade and of the brigade of artillery still on the main position.

As regards paragraph 3, if this rear-guard position has already been selected and reconnoitred by an officer, the director can take the officers straight to it, the arrangements suggested by the reconnoitring officer can be accepted, and the whole party can be taken over the ground by the director and the general scheme of operations can be discussed. This is perhaps the best way of doing the exercise, because it may take a long time for officers to walk over the ground and select a position for themselves.

When the first situation is issued, the officers, if they have to reconnoitre the ground, should be asked to meet the director at some convenient place in an hour and a half or two hours' time. The director would go over the ground and decide the best position to select, &c. When the officers reassemble he would ask them to explain their proposals, and would discuss the problem in the usual manner. He would then select the scheme which he thought was the best, either his own or that of another officer, take the officers over the ground, and work out the various details.

The points which would arise for discussion in a situation of this nature would depend a great deal on the direction of the line of retreat, and on the other matters already discussed. In this particular case the following details would probably be discussed. The extent of front occupied by the rear-guard; as it will be attacked on the flanks without fail by the Blue cavalry, it is as well to occupy a fairly wide front, but as the successful Blue infantry will also be close at hand, there must be sufficient troops available along the front to prevent, ward off, or at least delay a direct infantry attack against the centre.

The power of mobility of the artillery must not be lost, and consequently the artillery problem will be a very difficult one, especially considering that the attacking target will not be stationary. The question whether the cavalry commander should be independent of the General commanding the rear-guard will also afford a subject for discussion. If so, how can co-operation be arranged between the two so that the eastern flank of the infantry shall not be uncovered? In this particular situation the Red cavalry would probably neutralise that of Blue, but on other occasions the rear-guard cavalry might have lost very heavily and be of little use unless closely tied to the rear-guard.

The retreat of the troops from the main position through

the rear-guard will be a difficult problem to solve, but great assistance could be given by the artillery, especially if the heavy artillery can find a safe position on the other side of the river Suir, where they can see the pursuing troops. The chief aim would be to avoid masking the fire, especially the artillery fire of the rear-guard. There is little doubt that in modern war pursuit will be carried out by artillery fire more extensively than in the past, so this makes the artillery problem in such a situation still more important.

The rear-guard commander must be prepared at all times to make a more prolonged defence in this first position than originally seemed necessary, because blocks and breakdowns are almost certain to occur. The method of retiring from the rear-guard position will also provide an instructive problem. It is very easy on paper, but when we get on to the ground and find that the position is indifferent, the direction of the enemy's main attack is unknown, or, as in this case, that the line of retreat does not go straight to the rear, but turns from south to west at Caher, we begin to realise that we are engaged in a difficult and dangerous operation.

The second situation might deal with the retreat of the rear-guard across the Suir, and the occupation of another position on the right bank of that river.

Situation No. II.

1. The main body has crossed the Suir at Caher. The eastern flank of the cavalry brigade has been attacked by hostile cavalry, and the brigade has been compelled to fall back to the Caher, Clonmel road, and is about to retire on Ardfinnan.

2. The Red commander has directed the General commanding the rear-guard to fall back as rapidly as possible and occupy a position on the right bank of the Suir.

3. The details of the enemy's attack will be described to officers on the ground.

4. As officer commanding the rear-guard, explain how you propose to carry out this operation.

There will no doubt be a discussion as to the effect of an obstacle of this nature on the operations of a rear-guard, its advantages and disadvantages, and how it can be utilised to the detriment of the pursuit. The chief difficulty is to get the last troops of the rear-guard safely on to the right bank. Here again artillery, if it can find suitable positions, will be of the greatest assistance. The method of withdrawal from the last position will also be discussed, especially the question as to which part of that position is to be held as long as possible; how the artillery are to retire, and how many troops are to be finally left on the position until the last. Another point which frequently crops up is the number of ammunition waggons that should accompany each battery on such occasions, whether they ought to go back with the battery or beforehand; whether it is necessary to retain an ammunition column between the rear-guard and the main body. Probably the best solution is to replace ammunition, both artillery and infantry, when every fresh position is taken up. Both infantry and artillery on rear-guard should have an unstinted supply of ammunition available, and thus be in a position to make the fullest use of their quick-firing weapons. For the benefit of infantry officers a discussion might be initiated as to whether it is best to have howitzers or quick-firing brigades with the rear-guard; this would bring out instructive details regarding the methods of employment of each, their quick-firing power, their ammunition supply, and capabilities of picking up a moving target or engaging pursuing artillery. Supply of ammunition should be easier for the rear-guard than for the pursuing troops.

The question of employing engineers with the rear-guard might also be considered, especially as regards the tools they carry for entrenching and demolition work, how these tools are carried and whether they would be an encumbrance to the rear-guard. The position of the officer commanding the rear-guard is also interesting. Should he remain till the last on each position, or should he be the first to go back to make arrangements for the occupation of the next position? The method of commanding the rear-guard also presents difficulties which are worth careful consideration. There is no object in having strong reserves, and there is an object in occupying a wide front, because it is more difficult for the cavalry to get round the flank and interfere with the main body. If the rear-guard occupies a wide front in fairly close country it may be difficult to get it back on one road, and if two roads must be used the rear-guard is then under two commanders.

If officers are familiarised with all these difficulties during a peace exercise they will not be surprised when similar complications crop up in war. They will know that the command of a rear-guard is no sinecure, and, what is still more important, they will know the reason why.

(D) The Attack.

A great deal of what has been said already, when discussing the attack of an advanced guard, applies to any other attack. An exercise of this nature has distinct limitations, for the sufficient reason that the director and the officers who are receiving instruction cannot be in more than one place at one time. An attack extends over a very wide front, and it is impossible, and undesirable, to attempt to deal with more than a small part of this front.

The general command and staff work before the battle

commences can no doubt be practised on the ground, because it is simply a matter of reconnaissance, the formation of a plan, and the issue of the necessary orders. For example, on June 17 the officers on the Blue side could be taken out to the position held by the Blue advanced guard, and the enemy's position, so far as it would be known by Blue, could be pointed out by the director. The officers could then walk along the front of the position, keeping near their own outposts, and gauge its strength by studying the ground in front of them. The director would call a halt at every suitable spot and ascertain the opinions of the officers as to the strength of this part of the enemy's line; whether the ground favours the attack or defence, if the former whether it would be desirable for strategical and tactical reasons to deliver the main attack from this neighbourhood.

The chief strategical questions which would affect the problem would be whether this main attack, if successful, would not only defeat the enemy but drive him from his line of communications, and whether by moving our troops to deliver this attack we should unduly expose our own line of communications. The chief tactical questions would be whether the ground was favourable for the advance of the infantry, closely supported by the artillery, to a good fire position, where it might be reasonably anticipated that superiority of fire could be obtained over the defence; whether one or both flanks of the attack could be guarded by cavalry, a physical obstacle, another infantry attack, or the occupation of a defensive position; whether the attack, if successful, would gain such an important tactical point in the enemy's position that he could no longer retain any important part of that position; whether the attack would be subject to enfilade artillery fire from the defence, or whether the attacking artillery could enfilade the artillery and infantry of the

defence; finally, whether the ground in rear of the attack was suitable for the rapid movement of troops and for the various kinds of transport required for the administrative services of the battle.

The above, of course, are only a few salient points to consider—it would be necessary to write an encyclopædia even to attempt to suggest all the factors that might affect a tactical problem of this nature—but these will be sufficient to indicate the general line of discussion as each part of the enemy's position is examined. Having studied every part of the position which it would be possible to examine in war, the director might ask the officers to write a tactical appreciation of the situation, and prepare the operation orders that should be issued for the attack. The whole situation and the exact position of all the Blue troops would be known to the officers, because these details would have been given in the narrative which was issued the previous evening. It is unnecessary, therefore, to issue any situations. It would probably take the whole day to do the above work, but if any time was available at the end the director might select one of the plans suggested, and take the officers over the ground chosen for the main attack, pointing out the advantages and disadvantages, how the former could be improved and the latter overcome, and paying particular attention to artillery support throughout. There would be no time to deal with the various stages of the attack, but after making a plan, in considerable ignorance of the ground to be traversed, it is interesting at least to walk along the line selected for the main attack, because so many surprises are certain to crop up.

To practise the actual attack of a body of troops it is necessary to produce a series of situations, as was done when dealing with the advanced guard. If it is intended to work out the attack of a division the preliminaries only

can be dealt with as described above, and then the director with the officers must follow the movements of one brigade—in fact, it frequently occurs that the advance of one or two battalions only can be studied.

These attacks are peculiarly suited to the training of regimental officers, because questions regarding the situation and the ground are constantly raised which can only be dealt with in war by company, battery, and battalion or brigade commanders who are actually on the spot. Should the officer commanding a certain company halt at a certain spot or ought he to go on farther? During his next advance should he endeavour to gain the far edge of that copse in front, or should he try and capture the small farm to the right of it. Should the battalion commander reinforce the company which is trying to capture that small hill, should he fill up the gap that has occurred in the attack, or should he assist the company at the hill by pushing forward another company to occupy a supporting position whence they can fire at the hill without hitting the men in front? Similar decisions must be arrived at by artillery, brigade, and battery commanders regarding change of target or of position to meet special circumstances.

Hundreds of small questions of this nature which arise in war and demand immediate replies can be brought to notice and dealt with during these exercises, although the director and his party of officers can accompany in imagination only a very small part of the attacking force. It is the correct solution of these small questions which results in success in war, and therefore we shall not be wasting our time by trying to discover the difficulties which arise and by endeavouring to overcome them.

It is necessary that a suitable piece of ground should be selected for the exercise where there are small tactical features which can be carried one after the other. Open

country where the attack advances in great lines is unsuitable, because, as already stated, success does not depend so much on skilful forethought and leading as upon good discipline, *moral*, high-class shooting, and the closest co-operation between the infantry and the artillery. It is the recognition of the value of small tactical localities as a means for gaining the desired result—the defeat of the enemy's troops—that leads to success in battle, and therefore the study of such localities in peace-time is invaluable.

As an example of what might be done if the ground is found to be suitable, we can take the attack of the 18th Blue division against the Red force occupying a position north of Caber on June 17.

The details of this attack would have been arranged the previous evening after a reconnaissance of the ground, but we will suppose that the Blue commander has decided to employ his 52nd brigade on the west of the main road, his 53rd brigade on the east of it, and his 54th brigade, supported by the 45th brigade, to make the main attack against the enemy's eastern flank, the cavalry to guard the outer flank of this attack. One brigade of artillery to support the attack of the 52nd and 53rd brigades, and the remainder of the artillery to support the main attack. The Brigadier-Generals commanding the 52nd and 53rd brigades being informed confidentially that they must be prepared to act on the defensive if their attack fails, and therefore must keep a strong reserve in hand.

The director can order the officers to meet him at a selected spot where the 54th brigade would be compelled to deploy their first troops, and where the artillery would be finding positions to support the attack. The first exercise would be to discuss the orders and general plan of attack, when such questions as the following might arise: Was it sound to deploy the whole force and practically to

keep no reserve available for the unexpected event? A good deal would depend on the situation. The 18th division was ordered to clear the valley of the Tar and rejoin the main Blue army, *via* Ballylanders, in time for a battle somewhere east of Kilmallock, very much in the same way as the 2nd Bavarian Corps was ordered to move round the north side of the Hochwald before the battle of Worth in 1870, whilst the remainder of the Crown Prince's army advanced along the south side of it. It was therefore plain that speed was all-important. If the attack failed further reinforcements would be required from the main Blue army, because the latter could not continue its advance westwards with a hostile Red force, which some 25,000 Blue troops had failed to dislodge, still on their flank. On the other hand, it was quite possible that the greater part of the Red army might have occupied this flank position at Caher much in the same way as Stonewall Jackson occupied his flank position at Swift Run Gap to prevent Banks from moving farther south in April 1862. If the Blue commander threw every man into the fight from the commencement of the battle, and he suddenly found himself being attacked by a greatly superior force, he might be completely defeated, and the enemy would be on the Blue lines of communication before the main Blue army could interfere.

The solution would be found in the study of the ground. If there was a position which could be held strongly in case of accidents by the brigades making the frontal attack, there would be no serious danger in employing two brigades, one behind the other, in making the flank attack, more especially considering the fact that the Blue lines of communication could be more directly covered by the two brigades making the flank attack than those making the frontal attack, because they run back to the north-east almost parallel to the front of the Blue line of battle.

The above is only inserted as a type of what might be discussed, and to accentuate the fact that the solution of most of these problems is to be found by a study of the ground and of the immediate situation.

The next point that might be considered would be the distribution of the artillery, whether it should be placed entirely under the General commanding the divisional artillery, or some of it under the infantry brigadiers. Another question regarding the artillery would be whether any arrangements had been made for bringing a cross fire to bear on the enemy's eastern flank, so as to enfilade any defence of that flank. The whole plan of artillery co-operation should be carefully considered and alternatives suggested.

The position of the Blue commander would be an interesting point. Should he accompany the flank attack? If so, would it not be better to place the two brigades making the frontal attack under one commander? If so, where were the commander and his staff to come from? If the Red commander was to occupy a central position in rear, who was to command the main attack? or could it be left to the two brigadiers, of which the one commanding the brigade in second line might be senior to the other?

The question whether the frontal attack should be made before or simultaneously with the flank attack; if the latter, how are the two attacks to be timed, and who is to give the word? Should the artillery of the flank attack open fire directly they can see a target, even if the infantry are not yet ready to commence their advance? Should the attack have commenced at dawn, the brigades for the flank attacks having been moved to the required position during the night? If so, is it safe to move troops in this manner at night, unless the whole area to be traversed is covered by infantry or cavalry outposts? The

practice and training that are necessary in peace-time for such operations can also be discussed.

What has been done with the second line transport, the tent divisions of the field ambulances, and the cavalry field ambulance? Where are the ammunition columns and the supply columns? How are the telegraph company and the engineer field companies employed?

These and many others of a similar nature are all questions of command and staff work which it is as well to realise and be prepared to solve in war, and they show officers how much more administration there is in tactics than most people imagine. Having thoroughly discussed the plan of attack and the direct or concealed positions selected for the artillery, the first situation can be issued. The following is suggested as suitable:

Tactical Exercise on the Ground.

The Attack.

Situation No. I.

1. The attack of the 52nd and 53rd brigades has commenced, and a heavy hostile artillery fire can be heard to the west. The Blue cavalry and horse artillery to the east are also engaged with the enemy.

2. It is believed, but it is by no means certain, that the eastern flank of the enemy's position rests at A, and that his line of defence runs westwards through B and C; a counter-stroke is more likely to be delivered from his eastern than from his western flank, on account of the river Suir on the latter flank.

3. The 54th brigade and a field company Royal Engineers is drawn up in assembly formation at D, close behind the picquets of the outposts furnished by the 53rd brigade, which have been ordered to rejoin their brigade as soon as the 54th brigade passes through them. These outposts extend from the main road at E

through F to G, where they are in touch with the Blue Cavalry Brigade.

4. The artillery are all in the positions selected, one Q.F. brigade being in a position of readiness at H.

5. The 45th brigade is in assembly formation at J, and the eastern flank of the attack of the 53rd brigade is at K.

6. As officer commanding the 54th brigade describe your plan of attack and state what verbal orders you would issue to your battalion commanders.

The officers might be ordered to meet the director at some convenient point in front, which it is probable that the 54th brigade could occupy without serious trouble.

The discussion on this situation would deal chiefly with the infantry deployment and advance. The number of battalions that should be deployed in first line, the first objective that should be given to these battalions so that the advance can be made in stages. The employment of the engineer company and what is to be done with their tool waggons. Arrangements for the supply of ammunition and for collecting and disposing of the wounded. The positions of the ammunition columns and field ambulances. According to the scheme, the 45th brigade has, apparently, got no field ambulance, probably it was forgotten by the officer who prepared the general and special ideas. The means of communication between the 45th brigade, the cavalry, the 53rd brigade, the artillery commander, and the headquarters of the Red force. The question whether the general commanding the 54th brigade should communicate his requirements as regards artillery to the artillery commander direct, or through the headquarters of the Blue force. The position of the Blue headquarters and of the artillery commander would have been dis-

cussed and decided upon before the first situation was issued.

The attention of officers can then be directed to smaller matters. The advance of one of the battalions of the 54th brigade can be discussed. How many companies should be deployed at first, what is to be done with the machine gun, the ammunition mules, and the battalion bearers? The attention of the officers can then be directed to the action of one of the companies. How should it move forward and what should be the action of the scouts? Should two sections be deployed or only one? How can the companies in second line advance in close formation by making use of the cover afforded by the ground and without losing direction? How can one company assist the advance of another to the right or left of it? The general tendency should be to deploy no more men at first than is absolutely necessary. Directly a man is deployed a call is made on his moral and physical energy; he possesses a limited amount of each, so it should be husbanded carefully and used always with the best effect.

The second situation can then be issued. This would deal with the next stage of the advance. When preparing the various situations and deciding where they should be issued, we are greatly asssisted by a consideration of the ordinary course of an attack. Everything is done in stages. The first great object is to establish a good fire position from which the infantry and artillery of the attack may hope to obtain a superiority of fire over the defence. To reach this fire position every commander from a company officer to a divisional general is constantly asking himself the question "What shall I do next?"

For a small exercise with regimental officers the situations can be prepared and issued at short intervals of time and space. The company or battalion commander will say to himself, "I have gained this locality, ought I to go on

further, and if so how shall I advance and how far shall I go? How can I help the companies or battalions to the right and left either by capturing some locality in front to assist their advance, or by bringing flanking or covering fire to bear on that part of the enemy's line which they are attacking?" With brigade and divisional commanders more complex problems arise, which involve considerations of artillery and cavalry action, and many details of administration, some of which have already been referred to.

The director, when he is preparing the plan of the day's work can easily discover, by studying the ground, where each fresh situation is likely to arise, and, from his knowledge of what the enemy is doing, can create the various situations accordingly. With regimental officers, when small forces only are dealt with, four or even five situations can be worked out in a day, but on a Staff Ride, where numerous questions of staff work and command must be discussed, two or three situations are quite sufficient. The second or third situations should deal with a counter-stroke, so as to test the arrangements previously made, and ensure that the officers, while absorbed in their own attack, have not lost sight of the fact that they may be suddenly attacked themselves. The second situation might take the following form:

Situation No. II.

1. The leading troops of the 54th brigade have reached the line L—— M——. The exact position of the various companies and battalions in front line, in support, and in reserve, will be pointed out by the director on the ground.

2. The G.O.C. 54th brigade has been informed that the attack of the 52nd and 53rd brigades is progressing slowly, but that the cavalry brigade to the east have been unable to gain any ground to the front.

3. The parts of the enemy's position whence the heaviest

infantry and artillery fire appears to be coming will be indicated by the director on the ground.

4. (*a*) As G.O.C. artillery of the Blue force explain what changes, if any, should be made in the artillery scheme of attack; (*b*) as G.O.C. 54th brigade state what methods you would adopt to continue the attack, and what messages you would send to the G.O.C. Blue force as regards the action of the artillery.

5. The artillery officers will work out 4 (*a*), and the infantry, engineer and cavalry officers will deal with 4 (*b*).

NOTE.—If the officers are working in parties of three, one officer can represent the Blue commander, one the G.O.C. 54th brigade, and one the G.O.C. artillery, each party forwarding one complete scheme of action.

The discussions which would arise in this second situation would deal with more general points, including the action of the artillery and the cavalry, the movements, if any, of the 45th brigade in reserve, the replenishment of ammunition, the collection and disposal of the wounded, the filling up of any gaps in the line of attack, and the protection of a flank of artillery or infantry which had become exposed by the forward movement.

It will probably be found that more companies and battalions have already been deployed than was absolutely necessary, and there will be a temptation to draw away troops from the 45th brigade in reserve.

The artillery problem, especially if it involves a change of position, will form a most instructive subject for discussion, and the value of retaining in the first instance complete power of movement will be appreciated. The tactics of the howitzers and of the heavy battery can be fully discussed, together with any changes in the positions of the ammunition columns.

Seeing that the cavalry have been stationary since the commencement of the engagement, there will be a gap between the outer flank of the infantry attack and the cavalry brigade, owing to the advance of the former. The question as to how the infantry flank can now be protected, whether by moving up cavalry or infantry reserves, can also be considered. It occurs sometimes, as at Gravelotte, that the infantry, originally intended to make the flank attack, discover, after deployment, that they are not striking the enemy's flank, but part of his front. The cavalry covering the flank of the attack will then be in a difficult position, because they will have part of the enemy's main position in front of them, and also the enemy's cavalry to deal with. This will usually result in loss of ground by the attacking cavalry, and the further exposure of the outer flank of the infantry.

In this second situation it may be possible to see sufficient of the ground in front, and of the enemy's main position, to decide what ground should be held by the infantry as the final fire position. If this is the case the energies of the infantry commanders should be devoted to gaining this ground as rapidly as possible, and the artillery commander would arrange his plans so that every gun can take part in the final fire fight. Meanwhile the cavalry commander would be engrossed in his endeavours to protect the outer flank of the attack.

A scheme worked out in this manner brings many difficulties to light and causes officers to realise how rapidly troops get used up in an attack, and what great depth is required in all offensive action if success is to be gained.

E.—The Defence.

A tactical exercise in defence is easy to conduct because there is no movement of troops except as regards the counter-stroke. The exercise resolves itself into a study of

the ground and a selection of the best localities for the infantry, artillery, and administrative units of the force to occupy, the protection of the flanks by all arms, and the possibilities and preparations for a counter-stroke. The last being most frequently neglected and being the most important item of all.

It has been found in practice that the officers during one day's work cannot deal adequately with more than about two miles of front. If possible, therefore, the size of the force should be suitable for the occupation of such a position, say an infantry division and a cavalry brigade. This would enable the commander to retain a powerful reserve ready to assume the offensive, with sufficient local reserves to secure the main position. If it is desired to employ a larger force, then only part of the position can be studied in the day.

As the principles involved in the defence of a small position by one or two battalions with a few guns, and the operations of several divisions under similar circumstances, are practically the same, the size of the force which is selected for the exercise is immaterial. It is convenient to take the operations of the Red force north of Caher, as an example, because we know the general situation. It will be necessary to change, slightly, the intentions of the Red commander as stated in the narrative given in Chapter X., and to suppose that he has decided to fight a defensive battle, with the intention of attacking the enemy whenever an opportunity occurs.

The position would have been reconnoitred by some Red officers on the previous day, and all details regarding its occupation would be found in the orders issued by the Red commander. The officers should be ordered to meet the director at some convenient place on one flank of the position, and the subject for the first discussion would be the orders of the Red commander, disclosing his scheme of defence.

The details of this discussion, so far as the administrative arrangements of the battle are concerned, would be somewhat similar to those described for the attack. There would be three important matters to consider as regards the general situation. First, why the Red commander chose the position, secondly, his reasons for placing his reserves in the position selected, and thirdly his reasons for the distribution of his cavalry on one or both flanks of the position.

The reasons for the selection of the position would involve a study of the strategical situation, the direction of the lines of retreat, the possibilities for offensive action out of the position, the strategical and tactical difficulties of the enemy's attack, and the security of the flanks. The position of the general reserve would be ruled by considerations of where the enemy would be likely to make mistakes, and where the ground is suitable for offensive action. The comparative strength of the cavalry on each flank would involve a discussion on the strategical situation, the probable position and action of the enemy's cavalry, the suitability of the ground for cavalry action on one flank, as compared with that on the other, and the possibility of the cavalry being placed so as to cover the outer flank of a great counter-stroke.

In a carefully selected and skilfully occupied defensive position many difficulties in the way of ammunition supply, care of wounded, &c., would disappear, but other difficulties in connection with blocking up the roads in rear of the position by the tent divisions of the field ambulances, ammunition columns, local and general reserves, engineer tool waggons, artillery teams, &c., must be dealt with by the staff. The position and safety of the second line transport, supply columns, &c., would also be considered.

The general scheme of artillery defence would then be studied and a reason required for everything. These

reasons are perfectly obvious to artillery officers, but it is desirable that infantry officers should also be acquainted with them, because then they learn what can be expected from the artillery, and what is difficult or dangerous. It is equally important that the artillery officers should become thoroughly acquainted with the difficulties of the infantry, so that they can play their part of assisting and supporting the infantry at every period of the battle.

Artillery subjects would be—the possibility of enfilading any part of the attack, especially with heavy guns; the difficulties of observation; the system of control, involving rapid change of target, and concentration of fire; the tactical use of howitzers in the defence, especially for sweeping the reverse slopes of knolls, &c., where the enemy might collect, or any point where the enemy's front might be narrowed; observation of fire from balloons; arrangements of telephones and communication generally between the infantry and the artillery; whether any of the guns should be placed under the command of an infantry brigadier; the power of the artillery to deal with the hostile artillery and later with the enemy's infantry; and, finally, the reasons for placing more guns in one part of the position than in another.

As regards the infantry, reasons might be elicited for the selection of the front line of defence, and for the comparative number of men employed in various parts of the line; other points for consideration would be the positions selected for the local reserves, and for the machine guns, and whether the latter are to be brigaded or not; the number of troops that are to be put in the firing-line at the commencement of the battle, and what the commander proposes to do if the attack comes against his right or his left front instead of, as he expects, against his centre. The withdrawal of the outposts, and the occupation of any advanced positions would also be

considered. It will be seen from the above details that it will be necessary to study not only the command orders but also the brigade orders that would have been prepared the previous evening.

The passive occupation of defensive positions has led to so many disastrous results in former wars, that when suggested it is as well for the director to ascertain that the officer commanding the force has a good reason for adopting such a course. Any officer who occupies a defensive position and stands to receive battle should ask himself the question:

"Where do I expect my force to be at the end of the fight?"

There are only three replies to this question.

1. The force may have repulsed the attack, advanced out of the position with a great part of the troops, driven back the enemy, and be following him up.

2. It may have repulsed the attack and retained its original position.

3. It may have been driven back itself and be in full retreat.

The first of these alone means victory, and therefore if an officer occupies a defensive position with the object of gaining a victory, he must, from the very first, dispose his troops so that a large part of his force is well placed and ready to attack, closely supported by artillery fire, with cavalry available to guard the outer flank of the attack, and to confirm the success.

These and other points which will be suggested by the officers or will readily occur to the director as the discussion proceeds, will form a very instructive conference.

Having dealt with the general plan of battle, the director can now turn the attention of the officers to the details of the defence, commencing with the flank where the officers have assembled. The defence of a flank is at

all times a peculiarly instructive exercise, because the ground in two positions is never the same, and consequently the flank in each case must be dealt with in a different manner.

The principles contained in Combined Training regarding the defence of a flank should be brought to notice by the director, and the officers should endeavour to apply the principles to the situation and ground in front of them. The officers might then be told to walk over the ground in the neighbourhood and write down in their notebooks a description of how they would defend the flanks with the troops allotted for the purpose in the orders of the previous evening. When the officers have reassembled and they have explained their schemes, some of the following points will form instructive subjects for discussion :

The great object of every commander, when acting on the defensive, is to meet the main attack with the main defence, to contain the holding attack against other parts of the line, and preserve a large force for offensive action. This was the system adopted by Wellington, who was a master in the art of active defence.

Officers, when occupying defensive positions, frequently refuse the flank in order to bring fire to bear over ground at an angle to the front. This leaves a weak salient at the very point where the enemy's attack will be delivered if he chooses this flank for his main attack. Wellington's method was to occupy lightly all important tactical points along his front, and wide of his flanks, with strong local reserves in rear, and keep a powerful force available for counter-stroke. If the attack came from any direction but the front he thus retained the power of changing the direction of his line of battle and opposing a powerful defence to the enemy's main attack when it became apparent, drawing in his reserves from elsewhere. The angle in his position was not therefore on the flank, but towards the centre, where

the enemy was making what is now called a holding attack, and therefore this angle was not so dangerous. It is very instructive to endeavour to apply this principle to modern war during a Staff Ride, but such an operation requires very careful reconnaissance and good staff arrangements beforehand.

Any defence of a refused flank is very apt to be enfiladed by the artillery of the attack. The flank itself is liable to a converging fire of hostile artillery, whilst the artillery fire of the defence is rarely able to enfilade such an attack, and must naturally be diverging. The increasing range of modern artillery accentuates this disadvantage to the defence; the arc of possible artillery positions round the flank of the defence is much wider now than it was formerly, because it has a longer radius. For example, at the battle of Ligny in 1815, the French could not deploy half the number of guns against the Prussian salient at St. Amand that they could to-day. Such a salient under modern conditions of war would probably be untenable by the defence. The artillery problem for the defence of the flank will therefore be very difficult, and endeavours should be made to find positions for a large number of guns that can deal in safety with an attack against the flank.

The infantry defence of any part of a position is always frontal for the company, and usually for the battalion, the selection of the exact spot where each man is to fire from is the most important consideration. During these exercises, especially with regimental officers, it is essential to stand in the exact place suggested for the infantry and for the guns. To deal in generalities and to allow officers to state vaguely that the infantry will be deployed along that bank, and the artillery will be placed on that hill, affords no instruction. There are generally alternative positions, both for infantry and artillery, and the object of the exercise is to discover which is the best for each.

Our old friend, the convex slope, is a most difficult problem to deal with. At the battle of Worth in 1870, there were several spurs with convex slopes which ran straight out of the French position. The French occupied the points of these spurs on what might be called the forward crest. Many people think they should have gone right back; others think they should have gone right forward; but every one agrees that a convex slope should be avoided if possible. Under more modern conditions of war the forward position, about a third of the way down the slope, appears to be generally condemned. The field of fire immediately in front of the trenches is very short, and the fire over the low ground beyond is of a plunging nature. Very high authorities consider that it is best to go right forward to the foot of the slope and place the artillery in concealed positions on the top of the hill in rear. The field of fire is usually better, the ground is frequently hidden by trees or crops, and consequently it is not so easy for attacking artillery to deal with the infantry of the defence, and if there is any covered way down the slopes to the foot, it is probable that the disadvantages are less in this case than in any other. At the same time, if there is no covered way down the slope, no reinforcements, ammunition, water or food can be passed down to the defences during daylight, and the wounded must wait till dark before they can be removed. The system of going right back behind the crest is somewhat similar to Wellington's usual method. The troops are immune from hostile artillery fire, but can make little use of their own. For a force greatly inferior to the attack in artillery this method would probably be the best. It would be extremely difficult for the attack to advance beyond the crest, and if they gained that during the day, a few local counter-strokes during the night would probably dislodge them.

In the search for a good field of fire for the infantry another difficulty will crop up. In one part of the line it will be desirable to go forward, and in another to go back. The result will be that the general line of defence is not clearly defined, and every marked salient caused by the occupation of a firing position some distance in advance of the rest will be a source of weakness to the defence. The desire to go forward is clearly referred to in Combined Training, and we are told that the temptation must be resisted. It is necessary, therefore, for us to harden our hearts and be prepared to accept a bad field of fire along some parts of our line of defence. The method of reinforcing the infantry firing line can be considered, and the number of troops which are required for each part of the position should be noted as the exercise progresses.

Before leaving the flank the director may ask the officers to consider whether, given a favourable opportunity, the ground would be suitable for a counter-stroke to be delivered outside this flank. The suitability of ground for an operation of this nature depends chiefly on the absence of obstacles, the possibility of adequate support from the greater part of the defending artillery, a straight line of advance without any change of direction to the right and left and over ground which is not likely to be under a heavy artillery or enfilading fire from the attack. The possibility of enfilading from the main position any hostile troops that form front to meet the counter-stroke. The ground on the outer flank of the counter-stroke being suitable for the action of horse artillery and cavalry, and the inner flank protected by the main position. It is these considerations which make it difficult, in modern war, to deliver a counter-stroke from the centre, but if the enemy is making a heavy attack on both flanks, and he is defeated in his weak centre, the blow will be most deadly, and

he will probably be unable to collect the wings of his army without retreating some distance from the field of battle. At Salamanca Wellington cut Marmont's force in two and completely defeated him, and compelled him to retire to Burgos. At Austerlitz Napoleon defeated the Russian and Austrian centre and finished the war. In both these battles the attackers were endeavouring to strike the flank nearest to the defenders' line of communications, but left their centre inadequately guarded.

A selection from any of the above points will form suitable subjects for discussion before leaving the flank of the position. The officers should then be taken along the line of defence, halting and deciding on the defence of each tactical point as it is reached. It will be found that large numbers of troops are used up very rapidly, and the officers, as they proceed, will be compelled to limit their allotment of troops to each locality to what is absolutely necessary, and not to what they consider desirable. In this manner the strength and weakness of the various parts of the position can be gauged, and the troops allotted accordingly. Many alternative artillery positions will be selected and the sites for gun-pits chosen. The local reserves will be placed behind the weakest part of the position more with the object of delivering a local counter-stroke than to reinforce the line of defence.

Woods close in front of a position are not a very great danger if their near edges are under effective fire. It is extremely difficult to get attacking troops through a wood in good order, and even more difficult to initiate an attack from the edge nearest the enemy. Large woods on a flank cause uneasiness to the defence, but it is difficult to attack out of them, and still more difficult to find artillery positions to support the attack.

A stream well in front of a position is useful for outposts before the battle, but it is fatal to a counter-stroke.

Small features, such as knolls, copses, farmsteads, and enclosures, favour the attack rather than the defence. They give objectives to the attacking battalions, and form rallying points in case the attack is driven back. These features close in front of the line of defence are peculiarly embarrassing, and are frequently occupied as advanced posts. It would be impossible here to enter into a dissertation on the subject of advanced posts, but points for discussion would include the difficulty of reinforcing them, supplying them with ammunition, and removing the wounded; the concentrated fire which the attack can bring against them, the clear mark they offer to the enemy's guns, and the difficulty in defending them, because it is rarely possible to bring a cross-fire to bear on the ground in front, owing to the fact that the troops on the main position have plenty to do to look after their own front. If the defenders are driven out of them and retire they will mask the fire from the main position, and the attacking troops, closely following up, will probably secure a good fire position, or may even gain a footing on the defenders' main position itself. If the garrison of an advanced post is compelled to surrender it has a bad moral effect on the troops behind, who begin to think the battle is going against them. At the same time, these posts frequently exist and must be dealt with, especially if they afford good cover for the howitzers of the attack. If occupied by the attacking troops, they will interfere with local counter-strokes, and facilitate the enemy's operations if he is making a holding attack against this part of the position.

The effect of woods on or in front of a defensive position can be discussed with advantage, because officers appear to be very fond of defending woods and attacking through woods. The chief points are the enormous number of troops they absorb both in attack and defence and the

indecisive nature of any struggle for their possession, especially inside the wood itself.

If a company is sent forward to the attack over fairly open ground every man goes forward and at least uses his rifle, even if he does not hit anything. In the same way, every man who is sent forward to a shelter trench on the defence can also be made to use his rifle; but it appears from the experience of past wars that a large number of men who get into a wood do not use their rifles at all, and are practically lost to the fight. The bravest go on, and they lose heavily, especially in officers. This increases the difficulty of control, and gives further excuse for doing nothing.

It is probable that a clearing in a wood is even easier to defend in modern war than it was in the past. With quick-firing rifles the defenders can have several shots at men rushing the clearing, whereas thirty or forty years ago they could have only one shot. The clearing on the left flank at Worth, though it absorbed a vast number of French troops, was never carried by the Germans till they had won the battle in another part of the field.

If the scheme allows plenty of time to prepare the position for defence, a discussion on obstacles will be instructive. An obstacle should always be under fire from the defence, and, if possible, should come as a surprise to the attack. For example, if it is proposed to put a wire entanglement on a low ridge in front of the defensive position, the site selected should be well down the near slope, so that the attackers when lining the crest will not see it till they advance, when they must either run back or be delayed at the obstacle, in either case suffering heavy loss.

All kinds of problems will arise in the selection of the actual place where the infantry and the artillery are to be placed, but the chief points to bear in mind are: first, to

endeavour to obtain the fullest effect from the long range of both guns and rifles; secondly, to ensure that the ground in front of the position is swept at least by infantry or artillery fire in front of the strong points, and by both artillery and infantry fire in front of the weak parts, or where the enemy is likely to make his main attack. Machine guns in weak parts of the line of defence are invaluable, and if well concealed can do almost as good service at short range as shrapnel. Behind every weak part of the defence local reserves should be available and told off to make an immediate counter-stroke if the enemy penetrates the position.

The above points, mostly elaborated from Infantry, Artillery, and Combined Training, will form ample subjects for discussion, and it is easy to bring forward others.

Having completed the tour of the position, if there is time, it is always interesting to go out to the enemy's side and see how it looks from the point of view of the attack.

It should be understood by all officers taking part in these exercises that the decisions given by the director regarding the scheme and the progress of events should be treated quite differently as compared with the decisions given regarding the application of the principles of strategy, tactics, or administration.

The decisions regarding the scheme must be absolute; they cannot be disputed, and no good purpose can be served by making them a subject for argument. The director, before the exercise commences, should make up his mind what the enemy would probably do to meet each new situation. If he decides that the enemy when heavily attacked on the left flank will deliver a counter-stroke from the right flank, the director should stick to this plan throughout. He should not change the movements of the enemy merely to checkmate the officers who are endeavour-

ing to solve the problem. At the same time, the exercise should not be allowed to go too smoothly without any difficulties arising during the operations. The director should endeavour, at each stage of the proceedings, to introduce certain difficulties into the situation which are likely to occur in war, but not to pile up difficulties to defeat every suggestion which may be put forward by the officers under instruction.

The decision regarding the scheme having once been given, it must be accepted cheerfully by the officers, who should be given to understand that though the situation may appear to be difficult, unreasonable, or even impossible, the problems which arise in war are even more unreasonable or impossible. An officer who is attacking with one division, against an enemy who is believed to have only a brigade, may feel some indignation when the director informs him that the attack of part of his division, even though supported by heavy artillery fire, has failed. Yet in war such things are the rule rather than the exception. For example, an officer may deploy one brigade of his division supported by another, but he cannot expect the leading brigade to carry the position without some assistance from the brigade in rear.

The decisions regarding the application of the principles of strategy, tactics, and administration can be treated in a different manner. We all know that there is more than one solution to a problem, and no one can say which is the right one, or which is the best, in the absence of real men, bullets, and shells. The director, however, when giving his decisions, discards one solution and accepts another, because the one is opposed to the accepted principles of war and the other is not. It is frequently a matter of opinion whether one plan is better than another, when both are good; but when one plan violates the principles of war and another does not, it is easy to decide that the

one is bad and the other good, and to produce conclusive arguments to prove the fact.

When the decision is given by the director, the officers should be afforded an opportunity of explaining their own ideas on the subject, and even be allowed to suggest criticisms of the plan adopted by the director. Discussions which arise on these matters are invaluable—in fact, they are the essence of the instruction which is imparted.

At the same time, officers should be given due credit for carrying out even an indifferent plan with determination and vigour. The histories of past campaigns are fruitful of examples where success has been purchased by these qualities rather than by the skill displayed in the preparation of the plan. If officers during these exercises are taught that everything they do is wrong, they are apt to lose faith in their own abilities, or else to doubt the abilities of the instructor.

The whole object of the exercises is to teach officers to rely on their own opinions and resources when the enemy is in front of them. The director therefore should be careful to give full credit for everything that is good in any course of action which is recommended; in fact, his attitude throughout should be favourable rather than antagonistic to the opinions expressed by the officers.

In order to ensure continuity throughout the various situations, the plans recommended by one officer should be followed throughout. The officers who proposed other plans must drop their own ideas when commencing to study the next situation, and accept the plan put forward in the last situation by the officer, usually the senior, selected. If considered desirable, the plan finally proposed by the director at the close of each situation can be adopted as the working basis for the next situation. The director

before giving his own plan to the world has had the advantage of studying, discussing, and criticising the suggestions put forward by all the officers, so that, even if the original plan he had in his mind is open to criticism, the plan which he discloses at the end of the conference will probably be the best.

CHAPTER XIX

TACTICAL EXERCISES ON THE GROUND—(*continued*)

A. Exercises for Cavalry Officers only.
B. Exercises for Artillery Officers only.

Cavalry move so rapidly and the situations change so frequently that though the general principles of conducting these exercises are the same as already described, there are certain modifications which it is advisable to bring to notice.

In the case of combined operations we found that an infantry division was the largest force that could be employed for the purposes of the exercise. When practising the operations of cavalry alone it is probable that the size of the force should be limited to a brigade, with a battery of horse artillery. This is necessary partly because large bodies of cavalry manœuvre over such wide areas, but chiefly because the greater part of the ground where each situation is to be worked out must be under the view of the officers.

The ground chosen for the exercise should be suitable for the action of cavalry. In close country the whole brigade could not act together, even the regiments would be split up, and it would be better, in such ground, to practise the operations of a regiment or even a squadron. Open undulating country, with a certain number of tactical localities, where dismounted fire could be usefully employed, is the type of ground to select.

With such a large force as a brigade it is better to practise the action of cavalry against its own arm rather than against infantry. The only occasion when a cavalry brigade in one body could operate against infantry with any chance of success would be in some complicated situation which it would be extremely difficult to produce in a scheme. Everything would depend on the *moral* of the infantry, the manner in which they were surprised, the exact position they occupied on the ground, and the losses suffered by the cavalry. These things can be practised to a limited extent at manœuvres, but they are out of place in a tactical exercise on the ground, where there are no troops to assist the imagination of the officers.

It is, however, quite easy to practise any administrative or tactical situation which requires a decision before the squadrons move. The director standing on the ground with the officers can produce situations which involve the rapid study of the ground in front, and equally rapid decisions; in fact, during a purely cavalry Staff Ride most of the work on the ground would consist of exercises of this nature.

The following suggestions may be of use to indicate one method of conducting the operation. The general situation would have been known and the orders prepared the previous evening. These orders should be taken on to the ground, so that any mistake may be indicated during the progress of the exercise. The situations which would have to be dealt with by a cavalry brigade would arise after a good deal of work had been done by the scouts and by the advanced squadrons.

As an example we will take the situation on the Blue side on the morning of 16th, in the scheme worked out in Chapter V., and make one or two alterations so that the whole of the cavalry brigade can be employed (see Sketch No. 1).

The 18th Blue division is at Cashel, with outposts to the south. The 45th brigade is expected to arrive at Cashel from Holycross at 12 noon, when the whole force will advance on Caher. We will suppose that no regiment was detached to Rosegreen, but that the whole of the 9th cavalry brigade reaches Cashel from Ballagh at 8 A.M., and that it has attached to it one battery of horse artillery, one section ammunition column, one field troop of engineers, one cavalry field ambulance, and one company cavalry division transport and supply column. We will imagine further that the ground between Cashel and Caher is suitable for the action of a cavalry brigade manœuvring in one body.

On an ordinary Staff Ride the following details would have been worked out the previous evening, and all officers would be acquainted with them:

(*a*) The general situation would have been described in the narrative which was issued the previous evening.

(*b*) The orders issued to the G.O.C. 9th cavalry brigade by the General commanding the Blue detached force.

(*c*) The orders issued by the G.O.C. 9th cavalry brigade for the operations on 16th.

We already know the general situation, and therefore it will only be necessary to invent the orders mentioned in (*b*) so as to get a working basis for explaining the exercise. We will suppose that these orders are of the following nature:

The cavalry brigade is not required to cover the front of the 18th division as it marches south from Cashel, but it is to prevent the enemy's cavalry from interfering with the eastern flank of the advance. It is to endeavour to discover the movements of the enemy's main body, especially if he is retreating through Caher, or is occupying a position north of that town. The infantry outposts to

the south of Cashel are holding the line ——, ——, ——; they frequently see hostile cavalry patrols; they have obtained no information regarding the enemy's strength or movements, except that early this morning a man belonging to the 25th Red hussars was shot close to the centre of the outpost line, and a patrol belonging to the 30th hussars was captured by the divisional squadron on the extreme left of the outpost line. The outposts have not been attacked.

It is unnecessary to invent the orders issued by the G.O.C. 9th cavalry brigade, but on these orders the director would prepare the first situation, and the officers would have been ordered to meet him at some place in rear of the ground where the exercise was to be worked out.

It is very desirable on a cavalry Staff Ride that the officers should be mounted. Each situation can be dealt with rapidly, and then it is necessary to get on to fresh ground for the next problem. In open country some distance must be covered to reach this ground, and, if the officers are on foot, the number of situations which can be dealt with will be small. If, however, motors are available to take the officers from one locality to another, the horses can be dispensed with.

Before issuing the first situation the orders prepared by the G.O.C. for the advance from Cashel should be discussed. The number of squadrons sent forward, the roads, tracks, or direction selected for each, the patrols that were ordered to be sent out, the line of advance of the main body, the position of the various administrative units attached to the brigade, their security, the method of communication with the advanced squadrons and with the main body, would all require consideration. The first situation could then be issued.

Tactical Exercise on the Ground.
The Action of a Cavalry Brigade.

1. The first paragraph would give the exact position of each of the advanced squadrons and of the main body. This would be obtained from the cavalry brigade orders, coupled with the director's knowledge of what the enemy was doing.

2. This paragraph would contain a summary of the information received from patrols and from the advanced squadrons, and might be of the following nature:

By the time the headquarters of the brigade reaches A, the following reports have been received. The squadron on the Cashel–Newinn road has been stopped about B by rifle-fire from C and D, and has also been fired on by artillery from the direction of C. All detachments east of the above road have been stopped on the line E, F, G, except the squadron on the Rosegreen–Clerahan road, which has driven a hostile troop from the latter village, and is now holding it.

3. As G.O.C. cavalry brigade, state what you propose to do. Officers can reconnoitre ground anywhere within the area occupied by their own troops. They will meet the director at H in half an hour.

The above may result in two different plans of action. The G.O.C. cavalry brigade may reinforce one of his advanced squadrons, and endeavour to discover further information before he uses the greater part of his brigade, or he may decide to concentrate at once and endeavour to drive back the enemy's troops at one point with the greater part of his brigade. If he decides upon the first course the director must issue another situation giving the result of the suggested operation. It would be interesting to work out this situation on the ground, but, as we are

dealing here with the tactical operations of a complete cavalry brigade, we will describe the method of conducting these minor situations later.

In these circumstances the second situation would describe what had occurred, and what further information had been obtained.

As an example we will suppose that the G.O.C. cavalry brigade has decided to reinforce the squadron at Clerahan with another squadron, and that these two squadrons have been unable to gain any ground to the south-west, but that one troop has reached Clerahan, where it was stopped by hostile cavalry. The remainder of the advanced squadrons have been unable to advance farther, and appear to be engaged with slightly superior hostile troops, but they have not been driven back. On the other hand, the cavalry commander may desire to waste no time, and decides to concentrate and attack before the enemy has time to concentrate. In this case the intermediate situation given above would be unnecessary. In either case we shall arrive at a decision on the part of the cavalry commander to concentrate the greater part of his force, and the discussion will bring out some of the following points.

The first and most important will be the locality selected for the concentration of the greater part of the brigade. This will be decided by a consideration of the orders received, of the general situation, and of the resistance so far met with, and also by a careful study of the ground in front. The orders and the general situation appear to demand successful action towards the east rather than towards the west, and the resistance offered also appears to facilitate action in this direction. The question of the ground can only be decided on the spot, but if there is any dominating tactical point in the neighbourhood, the possession of which is important either for

horse artillery action, for purposes of view to the south, or to facilitate attack, it is possible that the ground may overrule the other considerations.

Further points for discussion will be the number of squadrons that are to be left watching the enemy; any fresh patrols which it is considered necessary to send out; the time that will be taken to call in any squadrons; the suitability of the original arrangements made for the advance with regard to breaking up of regiments, and the number of complete regiments which will be available to act when the brigade is concentrated; the present position and security of the administrative units attached to the squadron; whether the horses have been watered and fed since starting from Ballagh in the early morning; and finally, the direction chosen for the advance of the cavalry brigade. Having discussed these matters, the director, adhering to the line of advance selected by the cavalry commander, can take the officers forward to the place where the cavalry brigade would encounter the enemy. He can then dictate the situation. It is impossible to prepare this situation beforehand, because everything will depend upon what the cavalry commander has decided to do. The situation, however, will be of the following nature:

Second (or Third) Situation.

1. The enemy are holding the hill at K and the wood at L with dismounted troops. A patrol to the east of L has just returned and reports that about a regiment of cavalry was moving east behind K ten minutes ago. No artillery is in action.

2. As officer commanding the cavalry brigade, state what you propose to do.

When preparing this situation the director would know

what the enemy would be likely to have done during the previous operations, because he would know the original distribution of the Red cavalry and the intentions of the commander. The director must invent the rest, and will endeavour to produce on the ground an interesting cavalry situation. One or two important tactical points can be held by the enemy, but not so many as to preclude cavalry action on the part of the Blue brigade. If desired, one of these tactical points may be of such importance that it is necessary to capture it by dismounted action supported by horse artillery fire before cavalry action against Red is feasible.

The Blue cavalry commander would have to select the tactical points it would be necessary for him to hold to secure his own flank or rear; he would consider how his horse artillery could be employed; whether by some ruse the enemy's cavalry could be induced to move forward over ground where they might be surprised and attacked, or whether his own brigade could move forward to a more favourable position for cavalry action without being seen by the enemy.

The object of the exercise is to teach officers to study ground from the cavalry point of view, and a tactical situation should be produced which lends itself to such study. The instruction imparted depends entirely upon the officer who conducts the exercise. If he is possessed of a certain amount of imagination, he can introduce interesting problems in the way of defence, attack, rallying, retreat, &c. For example, in the above scheme the Red cavalry can be driven back in the first instance, and then they can be reinforced. The Blue cavalry, having concentrated first, should be in possession of the best ground, and therefore in a good position to again attack, and especially to take on any hostile artillery that may appear.

It is necessary to emphasise the fact that the actual

execution of any orders cannot be practised, except that sometimes officers might be directed to ride forward and show how they would lead the brigade, taking advantage of the ground which was covered from view by the enemy. These exercises enable officers to practise, so to speak, "by numbers", what they have to do in a flash and at full gallop in war.

When the tactical exercise involves the action of such a large force as a cavalry brigade, one or two horse artillery officers should take part in the work.

The director, when considering the action of the horse artillery, will find ample subjects for discussion in the application of the principles for the employment of that arm described in the official Training Manual.

Rapidity in the selection of an artillery position whence the enemy's troops can be brought under fire for as long a period as possible, before being masked by the cavalry attack; the position of the guns in the line of march; the relative position of the cavalry and the guns, and the safety of the latter whilst the attack is being delivered; the possibility of enfilading the hostile cavalry when it moves to meet the cavalry attack; the rapid grasp of the important features of the ground by the horse artillery officers; the supply of ammunition and the security of the waggons in second line; these and other points of a similar nature can be discussed with great advantage on the ground.

Minor situations, involving the action of one or two squadrons only, are much easier to produce, and probably more instructive, than a scheme embracing the operations of a complete cavalry brigade. Situations where one squadron is opposed to a hostile force are so numerous and so easily understood that it is hardly necessary to refer to them. Briefly they may arise in open country when the squadron, after driving back the enemy's patrols, encounters a formed body in rear; here everything depends on the

advantage of ground. In closer country the squadron may be confined to a great extent to the roads, and then the means of turning the flank of any troops in front and at the same time covering his own line of retreat will probably be the chief aim of the squadron commander. In very close country, where the movement of mounted men is confined entirely to the roads, there will be a great deal of dismounted action; in this case the method of conducting the exercise will be very similar to that explained in the smaller operations in Chapter XVIII., care being taken that the led horses are carefully concealed and at the same time are available at short notice if required. The action of a squadron at a defile is always instructive, especially at a bridge over a small river. In such a situation the squadron commander would probably engage the enemy in front with dismounted action, making as great a display as possible, and endeavour to discover a means of crossing the river elsewhere and turning the enemy's flank.

In all these exercises the supply of ammunition, the care of the wounded, the feeding and watering of the horses, and the avoidance of all unnecessary fatigue to the latter are of great importance. The officers should also be practised in writing messages explaining the situation and describing the tactical details of the ground they have traversed. Both at manœuvres and in war cavalry officers are apt to become so absorbed in the actual fighting and the details of patrolling and receiving messages that they forget to pass on the information to the higher commanders in rear.

In nine cases out of ten the cavalry are required above everything else to discover where the enemy is and where he is not. They frequently report where he is, but do not always report where the ground is clear, and the latter information is as important as the former.

Even for the smallest exercise, where only one squadron

is employed, the strategical situation and the task imposed on the whole of the cavalry should be clearly described in the scheme, if it is not already known to the officers. When to dismount and when to charge; what tactical point in front should be captured in preference to any other; what road should be selected when there is a choice of two; would it be better to advance to the right of the hill in front, to the left, or straight over it. How should a village be approached, and when some point has been gained in accordance with orders, how it should be defended till reinforcements arrive, and what outposts are necessary to give warning of attack. These and many other questions of a similar nature can be worked out during a tactical exercise on the ground.

B. Tactical Exercises for Artillery only.

Though it is generally desirable to carry out tactical exercises with artillery and infantry officers working together, some useful instruction has been imparted by working with artillery officers alone. The situations are taken from any period of an engagement, when the infantry are supposed to be forming part of an advanced or rear guard, an attack, defence, &c. These exercises are not very suitable for a Staff Ride, because on such occasions it is desirable to get the infantry and artillery officers to work together, but they would form the chief basis of instruction during an artillery Regimental Tour.

For each exercise there must be some definite scheme of infantry action involving artillery assistance and consequently the solution of an artillery problem. The various situations are easy to produce, and can be taken from any of those suggested in Chapter XVIII. It is as well to commence from the time of the first contact of the infantry with the enemy's troops, and to confine the exercise to about two situations, because these, if properly worked out,

will afford sufficient employment for one day. During a tactical exercise on an ordinary Staff Ride, there is not sufficient time available to thoroughly thrash out an artillery problem, because every artillery position cannot be reconnoitred beforehand or examined after it has been decided upon.

The exercise would commence with a study of the general situation if it was not already known, and of the orders that had been issued to the artillery commander. Any ambiguities in the situation or the orders would be brought to light in the discussion, and then the first situation would be issued. For the sake of brevity we will suppose that the first situation is the same as the third, described on p. 401, Chapter XVIII. where one brigade of field artillery is required to support the attack of the advanced guard on a position occupied by what may be anticipated are the enemy's advanced troops. It would be necessary to add to this situation the verbal orders given to the artillery commander by the General commanding the advanced guard. In a situation of this nature time is of great importance, because the enemy's advanced troops may be reinforced very rapidly, especially if he is advancing, so that no system of artillery support involving a lengthy study of ground would be possible. A good deal would depend on the position of the brigade in the column of march, and the place it could reach quickest to afford immediate support to the infantry attack. Questions would arise as to whether the whole of the artillery could be usefully employed; whether concealed or direct positions should be occupied; whether the brigade should come into action concentrated or with the batteries dispersed, if the latter the means of communication between the brigade commander and the batteries; whether it would be worth while to lay the telephone; and more technical details regarding the system of observing, ranging, etc.

Other points to consider would be how far the scheme of artillery co-operation would be suitable to support the main infantry attack decided upon by the advanced guard commander; whether the artillery commander should wait till the advanced guard commander has reconnoitred and made up his mind what to do before executing any reconnaissance himself, whether the two reconnaissances can proceed independently, or whether the artillery commander should accompany the advanced guard commander; whether the battery commanders can be doing anything meanwhile, and what orders should be given to the ammunition column. Most of these problems can be quickly decided on the ground, but they are all worth consideration, because their correct solution ensures the close, rapid, and highly effective support of the artillery during the infantry attack. Having discussed these points, the director should take the officers to each position selected and decide whether it is suitable for the requirements of the case; whether the batteries or the observing stations are unduly exposed, whether alternative positions exist which might, with advantage, have been selected; whether suitable localities can be found for the teams and first line of waggons, whether the positions selected can be reached without exposure to hostile artillery or infantry fire and view, and whether the batteries in action will require an infantry escort or not.

Having completed the first situation, the officers could move forward to the ground occupied by the enemy, and the second situation could be issued. This would be of a more complicated nature, would require a more accurate reconnaissance of the ground and a more careful study of the requirements of the case. The following is suggested as an example of what would be suitable.

2nd Situation.

Action of a Field Artillery Brigade (Q.F.).

1. The hostile position indicated in the first situation was carried by two battalions of infantry supported by two batteries of field artillery, the casualities amounting to 49 men.

2. The advanced guard commander is of opinion that the enemy's main position is now visible, and extends east and west through A, B, and C. The eastern flank probably rests about A, as the 9th cavalry brigade has occupied the ground about a mile north-east of that place. The western flank may be anywhere between C and the river Suir.

3. The G.O.C. advanced guard has decided to occupy a defensive position facing south extending from E to F. Two battalions will be in front line and two in reserve. The two battalions in front line have been ordered to push forward outposts as close to the enemy's main position as possible, and, with the field company of engineers, to prepare the position for defence.

4. The advanced guard is in touch with the 9th cavalry brigade on the east, and the divisional squadron has been sent to guard the right flank towards the Suir. It is considered that the enemy is more likely to attack the western than the eastern flank of the position.

5. The officer commanding the field artillery brigade is directed to select artillery positions in conformity with the above scheme of defence.

This exercise would involve a careful study of the ground along the whole of the front of the position, the selection of several alternative positions for the batteries to occupy in case an attack came from the south, south-west, or south-

east, and would necessitate the retention of power of movement on the part of the guns.

The best manner of conducting the exercise would be for the director to take the officers first to the western flank, study that, and then move along the line of defence very much in the same manner as suggested in Chapter XVIII.—E. The Defence. In this manner the various artillery positions could be selected, paying due attention to the line of infantry defence and to the possible direction of attack. Finally, a scheme of artillery co-operation which would best suit all requirements can be prepared and discussed, together with any changes that would become necessary if the enemy's main attack was directed on the right centre or left of the position.

In the same manner the action of a howitzer brigade or of a heavy battery can be worked out on the ground. The special purposes for which they are used in attack or defence would be thoroughly discussed, together with a consideration of when to use shrapnel and when to use high explosive shell, the suitability of the range, the class of target, etc.

The scheme should include a description of the part to be taken by the quick-firing guns as well as by the infantry during the action, so that howitzers, heavy guns, quick-firing guns, and infantry may all be working together for the attainment of the object in view.

During all artillery exercises on the ground technical questions involving changes of target in indirect positions can be thoroughly discussed. The director will provide the necessary situations, which should describe from time to time the action of the enemy and the requirements of the General commanding the force engaged.

For these artillery exercises it is usual to take out the signallers, range takers, directors, field plotters, dial sights, and aiming posts, in order that the officer who is conducting

the exercise can verify the lines of fire in indirect positions. For this reason the exercises are usually held within a few miles of the headquarters of the brigade or battery; but, in order to obtain a different type of ground, a very instructive exercise can be held without these accessories.

All the exercises described in this chapter and in Chapter XVIII. are suitable for Regimental Tours, either cavalry, artillery, or infantry. The method of preparing the schemes when required for this purpose is explained in Chapter XVII.—Regimental Tours.

CHAPTER XX

TWO EXAMPLES OF A "ONE DAY" EXERCISE, WORKED OUT NEAR THE QUARTERS OF THE OFFICERS WHO TOOK PART IN IT

VERY good instruction can be imparted by taking out a party of officers from their peace station for the day and working out a tactical exercise on the ground.

When selecting the locality there are usually three requirements to be considered. First, the ground must be suitable for the purpose; secondly, convenient trains should be available to take the officers close to the place where the exercise is to commence, and to bring them back in the evening; and, thirdly, the expenses of getting there and back should be reduced to a minimum. When no railways are available a brake can be hired for the day, and officers can drive out and back.

As in the case of a Regimental Tour, it is always desirable to obtain the services of an officer of a different arm from that of the rest of the officers, and this can easily be done at most stations.

One of these exercises is nothing more than a day cut out from a Regimental Tour. A scheme must be prepared and can be issued beforehand so that the officers may know the general situation before working out the details on the ground. At the conclusion of the work on the ground the director will collect the note-books containing the solutions of each situation by each party of officers, and will criticise the work. He will hold a conference in the

evening, after dinner, usually in the officers' mess, when he will discuss any fresh matter that had arisen from his study of the work, and recapitulate the important points that had been discussed on the ground. This conference will usually occupy an hour or an hour and a half, and will terminate the exercise.

The following examples of two tactical exercises of this nature which were actually held may be useful to explain more fully the general scope of the work and the method of conducting the exercise. In these examples the director's criticisms and remarks, both on the ground and at the conference, are given after each situation. It will be found in practice that subsequent consideration and a study of the work handed in by the officers may involve some elaboration of the remarks made on the ground, or even some alteration in the decisions which have been given. These would form a subject for discussion at the evening conference.

Officers do not always explain their intentions very fully during the discussions on the ground, and the director, in consequence, is apt to misunderstand their solution of the particular problem, and may be led into adverse criticism of a scheme which is really open to few objections. A study of the written work of the officer will disclose such an occurrence, and the director would then modify his original remarks during the evening conference. The director, like the officers under instruction, is only human, and therefore cannot be expected to be infallible, but if he considers his first decision is wrong he should say so, and thus increase the confidence that the officers have in his fair and open-minded criticisms.

The object of the following exercises was to give officers an opportunity of studying the best means of instructing junior officers and non-commissioned officers in their duties in front of the enemy, especially as regards the great

influence of ground on the correct solution of any tactical problem.

The half-inch map was used, in order to encourage officers to study the ground rather than the map. The maps which will be available for regimental officers in war will either be inaccurate or on a small scale, and will not be of much tactical value. It is essential therefore that officers and non-commissioned officers should have more practice in reading ground than in reading maps.

The schemes were based on incidents which have occurred in modern war, the forces employed varying from two companies of infantry to about half a brigade, with a small force of cavalry and artillery attached. The object of selecting situations from real war was to increase the reality of the scheme, to avoid long explanations in the general and special ideas as to why these forces found themselves in the situations depicted, to eliminate any discussion of great strategical problems, and to fix the minds of officers on the ground in front and on the solution of the tactical problem presented by the scheme.

Though the schemes were taken from real examples in war, no attempt was made to reproduce the exact situation, or to find exactly similar ground. The officer commanding a small force found himself in a certain situation, and he had to deal with it in what he considered to be the most suitable manner, without investigating too closely the strategy of the higher commander who had produced the situation. This strategy may not always have been the best, but in war we cannot always rely upon it being the best.

We may expect, therefore, that similar mistakes may again be made, and that we shall find ourselves confronted by problems resembling those which have been dealt with by others in former wars.

Before commencing the work each day, the director explained to the officers the object of these exercises, and

gave a brief description of the campaign from which the scheme was taken, and of the movements of the opposing forces which led up to the problem about to be solved.

Officers were given about an hour to study the ground and write down what they considered would be the best course of action to pursue. It is desirable that these solutions should always be written down, because it compels an officer to form a definite plan of action which can be commented upon afterwards. The work can be collected and studied in detail on return to quarters. At the end of the hour the officers assembled, and each officer described his own plan of operations. The director discussed and criticised the solutions put forward, and finally gave his own opinion as to what was correct. In the case of an advance to attack, the plan suggested by one of the officers was adopted, and the whole party moved over the ground and discussed the method of advance, the distribution of the troops, and the system of security and communication.

During the evening the director examined and wrote comments on the work done by each officer. A conference was held at 9.30 P.M., when all the instructive points which had been raised during the day were discusssd, and the officers' work was returned to them.

In the following account the director's remarks, both on the ground and at the conference, are given after each situation. To avoid unnecessary repetition, a few general remarks which applied to nearly all the work done by the officers are inserted at the beginning.

General Remarks on the Work done by the Officers.

There was a tendency to make wide turning movements with small forces. Such tactics are suited to the action of mounted troops, who possess great mobility, and who if they get into difficulties can rapidly retire, but are

unsuited to the action of small bodies of infantry, especially if working without the assistance of mounted scouts.

Regimental officers should possess clear ideas on the different applications of the principles of strategy and tactics.

The aim of strategy, is that the army should be manœuvred into the most favourable position for attacking the enemy; this usually implies that the enemy has been compelled to take up an unfavourable position.

One of the ordinary and most effective methods of bringing this about is for the army to advance against the communications or flank of the enemy's army, or pin him down with his back to an obstacle which he cannot cross. Having produced this desirable situation, the next aim of the commander is to gain a tactical victory. This can only be done by attacking and defeating the enemy's army, and by killing, wounding, and capturing his soldiers, thus breaking down his power of resistance.

When two large forces are opposed to each other, it is quite feasible to occupy the enemy's attention in one place, and make a wide turning movement involving a march of many miles with the remainder, provided always that the enemy is not given sufficient time first to discover the movement before it is too late, and secondly to attack and crush the containing force before the turning movement is developed. It should, however, be remembered that great commanders do not undertake this turning movement with the single object of gaining possession of the ground occupied by the enemy, and driving him back from it, but rather with the intention of attacking him where he is and defeating his troops.

This principle applies equally to the action of small detachments. If the enemy is in front of us, and our task is to drive him back, we should consider the best means of attacking him rather than endeavouring to manœuvre him out of his position.

It was noticed during these exercises that directly the advance was checked the officers frequently appeared to make up their minds that the ground in front was strongly held, that the greatest caution was necessary, and that a wide turning movement with its accompanying dispersion was preferable to an attack on the hostile troops in front. In each of these exercises the first situation indicated that so far no resistance had been met. This being the case, it was extremely unlikely that the hostile troops in front could be anything more than a weak outpost, ready to fall back if attacked seriously. Any wide turning movement against such an outpost would mean a dangerous approach with a small force to the enemy's main body, which would be behind the outpost. Every commander in modern war protects his front, first with cavalry, then with infantry outposts. If the cavalry is driven back, the next opposition is likely to be presented by small bodies of infantry, and it is not till they are driven back that the advancing troops need observe extreme precaution in the attack.

With small forces a wide turning movement is more dangerous now than it was twenty years ago. The defender with his long-range rifle can usually prevent any movement across and close to his front. If therefore a commander with only one battalion at his disposal decides to make a turning movement, he must go a long way round. If he uses the whole of his force for the purpose, he will probably uncover his own line of retreat, and if he decides to divide his force, and send part of it a long way round to gain the enemy's flank, he risks defeat in detail. Whilst this manœuvre is being executed the enemy is not likely to be doing nothing, and he may concentrate superior force against one portion of the attacking force before the other can do anything to assist it. A combined frontal and flank attack is just as effective with small forces as with large ones, provided no great dispersion of the

troops is involved; but with small forces it should be made with the definite object of attacking and defeating the enemy's troops in front, and not with the object of manœuvring him out of his position without fighting, unless in exceptional circumstances.

If we accept the truth of these statements, we can act boldy and with vigour against the first detachments of the enemy that we meet, and later on, when they are driven back, we must observe greater caution.

Tactical Exercise No. 1.

General Idea (*see* Sketch No. 22).

1. The situation is taken from the action at Podol (Calstock), on the Iser (Tamar), between the Prussians (Blue) and the Austrians (Red), on the evening and night of June 26, 1866.

2. The Blue army is advancing from the north-east, and, owing to Dartmoor (the Bohemian mountains), is only able to use two roads, one leading through Okehampton, and then branching to Launceston (Munchengratz) and Tavistock (Mohelnitz), and the other from Moreton Hampstead through Two Bridges and Yelverton station towards Saltash (Turnau).

3. The Red army has detached about an army corps to defend the line of the Tamar (Iser). The main portion of this force is believed to be south of Launceston.

Special Idea, Blue.

1. The IVth division and 4th cavalry brigade, followed by the Vth division, have been advancing along the Two Bridges–Saltash road, driving back Red cavalry. At 1 P.M. the IVth division reached Beer Town and bivouacked there.

2. The Vth division and 4th cavalry brigade pushed on to St. Budeaux, found the Saltash bridge destroyed, threw

a pontoon bridge across the Tamar, and occupied the high ground beyond with outposts. The enemy retired towards Launceston. The Tamar at Saltash is supposed to be 60 yards wide; it is not tidal, though the current is very strong.

3. The remainder of the left wing of the army is spread out on the road between Moreton Hampstead and Two Bridges. The advanced troops of the right wing drove the enemy from Bridestowe and bivouacked there; the remainder are spread out on the road between Bridestowe, Okehampton, and North Tawton.

4. At 2 P.M. the General officer commanding IVth division was ordered to seize the bridge at Calstock. Two companies were sent to hold this bridge for the night, and two companies to occupy the high ground just east of Beer Alston.

5. We shall carry out the task given to the two companies sent to Calstock.

Situation No. I.

1. Your two companies followed the two companies sent to the high ground east of Beer Alston, as far as the branch roads ½ mile S.E. of Beer Alston; you then advanced on Beer Alston, the other two companies continuing northwards. The enemy has not yet been met.

2. Write the orders that you would give verbally for your advance on Calstock.

3. In accordance with the above orders, your leading men reach the road bridge over the railway just south-west of Beer Alston station at 3 P.M. No enemy has been met so far, and the officer commanding the two companies advancing towards Gawton has just sent word to say that he has driven back a few Red scouts, and is occupying hill 500.

4. Describe the exact distribution of your companies at that hour.

The officers met the director at Beer Alston station at 9.15 A.M., when the above scheme was issued.

The officers were divided into parties of two, and were directed to meet the director at the road bridge over the railway at 9.45 A.M.

The director gave a brief account of the operations which led up to the outpost affair at Podol in 1866, which it is unnecessary to enter into here. The fact that the Prussian companies in 1866 were stronger than our companies was not taken into account. It was assumed that each company was at British war strength.

When the officers were assembled the director first dealt with the orders that were issued for the advance on Calstock.

Some officers wrote stereotyped operation orders which appeared to be out of place for such a small force as two companies.

All the officers took adequate precaution to protect their front during the advance, some officers throwing out a regular advanced guard.

With such a small force as two companies, which can deploy for action in a few minutes, the advanced guard would consist of little more than a few scouts, who would be sent forward some half a mile in front of the companies to make good any ground from which the enemy might open fire on the company advancing in close order. In more open country this distance must necessarily be somewhat increased.

Arrangements were made by some officers for maintaining communication by signal with the two companies sent towards Gawton.

It would be instructive for officers to discuss what transport, if any, it would be necessary to send with these companies, and whether it would be desirable to send a machine gun. Probably sufficient blankets and

food could be obtained on payment from the inhabitants of the villages; the question of cooking the food would also require consideration, the companies having been sent off before the regimental transport would have arrived.

The exact distribution of the companies was asked for chiefly to obtain a starting-point for the subsequent operations, so that time and place should be duly considered. The majority of the officers had either a section or a half company covered by scouts on the road about a quarter of a mile east of the bridge, with the remainder half a mile in rear of it. This seemed to be a suitable arrangement.

Situation No. II.

1. Shortly after crossing the bridge over the railway, your advanced troops are fired at from the hill with a clump of trees on it, half a mile south south-west of Calstock.

2. State briefly how you will attack this hill.

The officers were directed to reconnoitre the ground to the front, but were not to go beyond the crest of the little spur 600 yards north-west of the bridge over the railway. They were given an hour to decide upon their plan of attack, and were directed to meet the director in the field, just north-west of the bridge, whence a fair view could be obtained of the hill occupied by the enemy.

Discussion on the Second Situation.

As already noted in the general remarks, some officers showed a tendency to manœuvre the enemy out of his position, rather than attack him. The following plans were suggested by various officers;

(*a*) To attack the enemy on his front and eastern flank.

(*b*) To attack the enemy on his front and western flank.

(*c*) To attack the enemy on one flank only.

(*d*) To attack the enemy on his front only.

(*e*) To make a wide turning movement round his eastern flank and endeavour to gain the bridge, which, it was argued, would cut his line of retreat. Some officers also left a small containing force on the spur north-west of the bridge over the railway whilst this operation was being carried out.

There was one more alternative which no one suggested, though no doubt it would have occurred to an officer in real war, and that is the advisability of halting, or even retiring.

This idea certainly occurred to the officer commanding the two companies of Prussians in 1866, chiefly, perhaps, because the importance of gaining and holding the bridge for the night was not sufficiently impressed upon him when he started.

Before considering how far the nature of the ground would affect the choice of a line of attack, it is well for us to study for a moment the general situation, so that we may endeavour to gain some idea as to what the strength of the enemy in front of us is likely to be.

We must remember that while we have been advancing across Dartmoor the enemy's troops, which were believed to be at Launceston, may have marched down to Calstock, and our two companies may be opposed by an army corps. This possibility would be perfectly apparent to an officer placed in this situation in real war, and he would feel somewhat lost wandering into such a possible hornet's nest.

A careful study of the ground and the situation will, however, convince him that there is no hostile army corps on that small hill in front of him, because it is not big enough to hold a brigade.

Secondly, if a brigade or even a battalion is there, it is certain that the enemy will have pushed forward outposts beyond the road bridge over the railway, and no such outposts have been encountered.

We may assume, therefore, with some confidence that either a small force is holding the hill with the object of denying it to us, and that other troops are holding the bridge below, much in the same way as we ourselves proposed to defend the bridge on the right bank of the river later on in the day. Or else that the enemy, like ourselves, has recognised the importance of the bridge, wants to use it next day, and is advancing to defend it.

In the first case our best course of action will be to endeavour to drive the enemy from the hill as the first stepping-stone towards the capture of the bridge.

In the second case, the sooner we attack the better, because if the enemy is advancing, his troops on the hill can be rapidly reinforced, and we shall have little chance later on of gaining our object.

In any case we should hardly be justified in halting or retiring until we have made as strong an attack as possible against the hostile detachment on the hill, and have failed with some loss.

We must always remember in war, that if, in such circumstances as these, we attack and fail, or if we retire with little fighting and without good reason, we can hardly justify our action unless we have suffered some loss.

From the above arguments two points appear to stand out clearly. First, an attack on the hill is not likely to be opposed by the enemy in superior force; and second, that an immediate attack is necessary in order to obtain

the best chance of success. We can now discuss the plan of attack.

At the first glance it appears that a blow against the enemy's eastern flank is desirable, because it would threaten his line of retreat, whilst our own would be secured by the two companies on hill 500. Secondly, the right flank of our attack would be considerably protected by the river. Thirdly, owing to the nature of the ground, the initial stages of the attack could be made under cover, as there is a good deal of dead ground on this flank.

A careful reconnaissance disclosed, however, some serious disadvantages. A study of the ground, or even of Sketch No. 22, will show that if the enemy holds the road south-east of the wood at "A," and also the south-west corner of the wood at "B," it will be difficult to make a successful attack from the direction of Beer Alston station.

The enemy is very likely to hold these localities, because, owing to the enclosed nature of the country on his western flank with its high banks, the absence of roads, the proximity of the Tamar, and the deep railway cutting, he would consider that side fairly safe. Furthermore, as will be shown later, an attack on the east side of the enemy's position does not really threaten his line of retreat.

Some officers proposed to attack the wood at "B," and advance straight through it towards the Tamar bridge, believing that such an operation would compel the enemy to retire from hill 500. We can compare this idea with our proposals later on in the day when we were defending the bridge on the right bank, and we shall see the objections to such a method of advance.

Experience teaches us that an attack through a wood is always a doubtful enterprise. Control is lost, the wood absorbs a large number of men who are easily checked by a few, and very little result is obtained; straggling is greatly encouraged, and few but the bravest make much progress.

Modern weapons have not made it any easier to attack through a wood: the long range is useless; the quick loading rather favours the defenders in a wood; the smokeless powder is a disadvantage to the attack, because in former days the smoke used to hang about in a wood, and the attacking troops could advance under its cover and frequently surprise the defenders.

If two companies had been thrown into this wood, without any attempt being made to drive the enemy from hill 300, and without any knowledge of the state of affairs at the bridge, it is quite possible that they might never have come out of it except as prisoners of war, especially as the Tamar was close to their right flank and their retreat might have been cut off.

The physical difficulties on the enemy's western flank have already been referred to, and they appear to render an attack on that side undesirable, so we can now consider an attack from the south.

Such a small hill as the one under consideration could easily be defended on any side, so that when our attack develops the enemy can meet it in front. With such a small force as two companies we must in this particular case make up our minds that we have got to make a frontal attack whatever line we choose. It appeared to the director that the weakest part of this small position, or perhaps it would be better to say the easiest part to attack, was on the south, sending forward one company on the east side of the main road from Beer Alston station to Calstock, and one company on the west side. A converging attack could thus be arranged against the small wood on the top of the hill.

After considering the above points, the attack against the enemy's eastern flank, recommended by several of the officers, was followed on the ground.

A concealed line of advance for the two companies into

the valley north-west of Beer Alston station was selected. The action of the scouts and the method of deployment was discussed on the ground, and all necessary arrangements made for the attack on the woods at "A" and "B." After actually going over the ground the majority of the officers concluded that such an attack would be a difficult operation to conduct with any chance of success.

Though there was a good deal of dead ground, the enemy had a clear field of fire towards the south-west from the wood "B," and even if the wood at "A" and "B" had been carried, a second attack must then be prepared against the small wood on the top of the hill.

During the whole of this attack the enemy's line of retreat would not be seriously threatened, as was originally supposed by some of the officers. In fact, a successful attack made right and left of the main road appeared to be the most rapid and effective method of capturing the Tamar bridge, which was the ultimate object of the detachment.

The officers then went to the hill they had been attacking, and the third situation was issued.

Third Situation.

1. You have driven the enemy from the hill mentioned in situation No. 2, and he is retiring across the bridge at Calstock, closely followed by half a company in extended order. Your casualties are two men killed and seven wounded.

2. The officer commanding the two companies on hill 500 has sent one company to help you, and is holding the hill with the other company; he reports that there is no enemy in front of him.

3. One section of field artillery from the main body has just arrived to reinforce your detachment.

4. Describe how you propose to capture the bridge and gain the high ground to the north of it.

This was a pursuit, and if anything was to be effected immediate action was essential. Any delay would mean that the enemy could re-form and defend the bridge, and its capture would then become a most difficult operation.

This was thoroughly realised by the officers, and the majority suggested the following plan:

The guns to gain a position on the northern slope of hill 300, whence they could fire direct on any of the enemy's infantry who halted to hold the right bank of the Tamar, and also on the enemy as they retreated across the bridge and up the hill to the north.

The infantry were to press forward towards the river and, assisted by the guns, endeavour to keep the enemy on the run, giving him no time to halt and re-form. They were to occupy a covering position on the left bank and engage the enemy on the right bank, so as to enable a small detachment to cross by the bridge and secure a footing on the right bank.

In the further advance up the hill north of Calstock the artillery from hill 300 would again be of great assistance, not only with their fire, but by observing the line of retreat of the enemy, any position they occupied, and signalling the information across to the infantry.

The officers then proceeded to the church on the hill north of Calstock, and the fourth situation was issued.

Fourth Situation.

1. The high ground north of Calstock bridge has been captured by the Blue companies, with a loss of seven men killed and fifteen wounded, including the senior officer.

2. You have assumed the command of all the four companies, including the one still holding the hill 500.

3. It is now 6 P.M. and getting dark. The enemy appear to have retired in a north-westerly direction. State what dispositions you will make in order to hold Calstock bridge for the night.

The solution of this problem was facilitated by the bend in the river Tamar. If a line of defence could be established from the angle on the river north-east of the church to the angle at Inn south-west of the church, a front of about 1400 yards, the bridge would be sufficiently protected. This fact was at once recognised by the officers, and they proceeded to reconnoitre the ground with a view to the selection of the best localities to defend.

In such country, where the fields are small and enclosed by high banks, and the slopes steep, the enemy could not advance in force by night except by the roads. Of these there are three: one leading east along the top of the ridge towards the church, and the other two running close together and passing diagonally down the southern slope of the ridge, meeting near the bridge.

The ground to the north of the church was, however, more open, and it would be quite possible for a hostile battalion to attack from that direction during the night. Fortunately, the railway line in course of construction offered a good defensive position facing north and commanding this ground.

Almost all the officers decided to establish an outpost line with three companies, one company occupying each road, and the fourth company with the guns defending the bridge from the left bank of the river.

There is little doubt that the peculiar situation and the ground justified such a course of action, but the director was not certain that this was the best possible plan.

Giving due weight to the assistance afforded by the bend

in the river and to the difficult nature of the country, an outpost line of this nature cannot but be weak everywhere, and if one company is driven back at one point the other companies must also give way or be cut off.

An essential point to consider is whether it is of greater importance to hold the bridge itself or the high ground north of it.

If the enemy are able to gain possession of the bridge during the night they may destroy it; in that case a new bridge must be constructed before the army can cross. With our modern pontoon equipment a bridge could be thrown at this point in an hour or two, provided the high ground beyond was in our possession. One officer was of opinion that the pontoons could not be brought down to the river, but there appears to be a choice of roads in the neighbourhood (*vide* Sketch).

If, however, the enemy gained possession of the high ground north of the bridge, it would be necessary to drive him off before a bridge could be constructed, and this would be a more lengthy operation than making the bridge. It appeared therefore to the director that it was most desirable to retain a hold on the high ground to the north of it, solely to deny its use to the enemy.

The scheme suggested by the director differed but little from that adopted by most of the officers; the important variation was that he decided to defend a post round the church.

The line actually selected for the defence of this post extended along the railway line facing north from the church to the hollow road to the west; it then faced west along the east side of the hollow road, and ran southwards along a high bank for about 30 yards. It then faced south along the bank enclosing the field just south-west of the church. A line of defence facing east, just east of the church, was to be prepared later on if time permitted.

The total perimeter of this post was about 600 yards. A garrison of two companies was considered sufficient to hold the post during the night and for long enough next day to allow of the main body reaching the high ground to the south.

These two companies would furnish a picquet to the north and another to the west on the two roads leading in those directions.

One company would defend the two roads leading down the side of the ridge, and the remaining company with the two guns would occupy the bridges on both banks, the guns being on the left bank with some of the infantry.

The following special idea for Red was prepared before the exercise commenced, and formed the basis of the director's decisions during the day:

SPECIAL IDEA, RED.

1. The Red force, which consists of four divisions and two cavalry brigades, is about Launceston. The Red commander intends to cross the Tamar at Saltash and Calstock to-morrow and attack the Blue columns emerging from the Dartmoor defiles.

2. Preparatory to this move, one infantry brigade and one regiment of cavalry is despatched about midday to occupy the high ground on the left bank of the Tamar near Calstock.

3. The leading squadron of this force reaches the hill just south of Calstock when the Blue companies reach the road bridge over the railway, just south-west of Beer Alston station. The Red squadron occupies this hill and also the southern edges of woods A and B.

4. Before the remainder of the Red regiment arrives the Red squadron is driven across the Calstock bridge, and retires to the high ground about the church, north of

Calstock. A second Red squadron then comes up, but, owing chiefly to artillery fire from the hill south of Calstock, these two squadrons are unable to prevent the Blue infantry from capturing the hill north of Calstock.

5. Just as it is getting dusk the Red brigade arrives from the north-west and attacks the Blue troops occupying the high ground north of Calstock.

Tactical Exercise No. II.

General Idea (*see* Sketch No. 23).

1. The situation is taken from the action at McDowell (Menheniot) between the Federals (Blue) and the Confederates (Red) on May 8, 1862, with slightly smaller forces.

2. The Red force is superior in numbers to Blue, and is advancing north through Hessenford, along a very bad road, with the object of attacking and driving back the Blue force, which is believed to be advancing south through St. Ives.

Special Idea, Red.

1. The Red force, owing to the bad road, is greatly strung out. The head of the advanced guard, which consists of one squadron of cavalry, two batteries of artillery, two battalions of infantry, and one field company of engineers, reaches the railway bridge at Inn (Menheniot station) at 1 P.M.

2. For the last hour the squadron in front has been driving back hostile patrols with little difficulty, but it is now reported that the high ground about Menheniot is held by the enemy in some strength. The Red squadron is holding the two bridges over the river Seaton, south of Menheniot. Patrols report that no enemy has been met as far north as Cartuther, on the right bank of the Seaton,

but they are unable to advance north of the woods at, and west of, Coldrenick, on the left bank.

First Situation.

1. Describe the exact distribution of your advanced guard at 1 P.M., when the information contained in the special idea is received.

2. Write your orders for the attack on the high ground about Menheniot.

The officers met the director at Menheniot station at 10 A.M., and the above general and special ideas were issued. In order to lessen the labour of looking over the work, these officers were divided into parties of two, a senior officer working with a junior officer.

The director first gave a brief description of the operations which led up to the engagement at McDowell (*see* Sketch No. 11).

Jackson (Red) was opposing Banks (Blue) in the southern part of the Shenandoah valley. Banks had reached Harrisonburg at the south end of the Massanutton mountains, and was within twenty-five miles of Staunton, whence Jackson drew his supplies.

Jackson had taken up a flank position at Swift Run Gap, facing west, but Banks's position facing south was too strong to attack.

A Federal force (Blue) under Fremont was marching on Staunton by Franklin and McDowell, on the western side of the Shenandoah mountain.

The Federal plan was that Fremont and Banks should advance, capture Staunton, and drive Jackson eastwards towards Richmond.

Jackson was fully alive to the probability of this move, but wished to defeat one or other of the Federal detach-

ments before they combined. He decided to leave a containing force under Ewell at Swift Run Gap, march across Banks's front through Staunton, join Johnston, who with a small containing force was protecting Staunton on the west, drive back the leading troops of Fremont's force under Milroy, and then, with his supply depot at Staunton safe from any attack on the west, return and deal with Banks, who could no longer hope for any assistance from Fremont.

We shall deal to-day with the situation which arose when the Red force (Jackson), advancing along the Hessenford–Menheniot road, encounters the advanced troops of the Blue force (Milroy) about Menheniot.

The officers were told that they might reconnoitre the ground to the front, but that they could not go beyond the line held by their cavalry. They were ordered to meet the director at Menheniot station at 11.15 A.M.

Discussion on the First Situation (*see Sketch No.* 23).

The officers assembled at 11.30 A.M., and proceeded to the top of the railway embankment just north-west of Menheniot station, whence a good view of the spur running south from Menheniot could be obtained. It was raining heavily, and continued to do so throughout the day.

The director first pointed out to the officers the advantage of being able to get a good view of the ground they were about to attack, and to recognise any important tactical points the occupation of which would form a stepping-stone to a successful advance. Examples of such points were the hill about Coldrenick and the spur to the north of it; the general line of the hedges, their weak points for defence, especially when they ran like a wedge towards the line of attack; the possibility of bringing

covering fire to bear on the opposite hill from the railway embankment.

The director discussed the desirability of keeping the force concentrated as long as possible, and of avoiding undue extensions, so as to be able to deliver one powerful blow with all available troops.

Not to deploy more troops than were necessary during the first stages of the attack.

To avoid any wide turning movements which would uncover the front of the main body in rear and cause dispersion and weakness everywhere at a time when the enemy may also be advancing and preparing a concentrated attack on one part of our force.

The Distribution of the Advanced Guard

The object of this part of the exercise was to study the most suitable system of distributing the troops in a small advanced guard in column of route—that is to say, the position of the cavalry, the artillery, each company or battalion of infantry, and of the patrols and scouts; also the distance between the various parts of the advanced guard. Another reason for working out these details was to start the operations from some fixed basis.

Some of the officers placed one battalion in the vanguard, others half a battalion, and others two companies. When advancing through such close country, where the enemy cannot move rapidly off the roads, it is probable that a small vanguard of only two companies would be sufficient. It is always desirable to reduce detachments as much as possible, and the main object of a vanguard is to make good any road or ground over which the remainder of the advanced guard is about to advance in close order. The squadron of cavalry, by patrolling the roads to the front and flanks, would give warning of approaching

danger, and two companies would be sufficient stiffening for the cavalry if the enemy's advanced troops were encountered.

Most of the officers placed the engineer company with the vanguard. This appeared to be right, especially as the scheme stated that the road was very bad, so that obstructions, especially at the crossings over the streams, might be removed at once. It was considered unnecessary for all the waggons containing the technical equipment of the engineer company to follow the vanguard, and as no wide streams had to be crossed, the pontoons might be left with the main body. It was considered that the two batteries should be placed between the two infantry battalions, and that the second line transport should not accompany the advanced guard.

The distance of the vanguard from the main guard was discussed, and it was considered that this depended entirely upon the nature of the country, the ruling principles being that the cavalry, supported if necessary by the two companies of the vanguard and the engineer company, should make good all ground whence the enemy could bring fire to bear on the road which was to be followed by the rest of the advanced guard.

The Orders for Attack

Some of the officers wrote out long and formal orders for attack, which hardly appeared necessary for such a small force. It is desirable during these exercises to do everything as it would be done in real war. In such a situation the commander of the advanced guard would assemble the officers commanding units and explain to them his plan of attack, and would then direct them to carry it out.

The plans recommended by various officers can be divided into two categories:

(*a*) To leave a containing force along the railway north of Inn, move up the right bank of the river Seaton with the remainder, cross at the bridge north of point 468, and attack Menheniot.

(*b*) To leave a containing force as above, cross the Seaton east of the inn or at Pucklepit bridge, and attack Menheniot from the direction of Coldrenick.

No officer suggested what appeared to the director to be the best course: to attack direct along both sides of the road leading from the inn to Menheniot.

The disadvantages of plan (*a*) appeared to be:

1. That the front of the main body in rear was somewhat uncovered, and the enemy might attack and turn the containing force on the east flank before our main attack had developed. Little was known about the situation on the left bank of the Seaton, except that the cavalry were unable to penetrate beyond Coldrenick, but it was unlikely that the enemy would have any large force there, or we should have encountered his advanced troops before. Still it was quite possible that he could rapidly bring on to the ground as many troops as we could bring against him.

2. That an attack from this direction necessitated the capture of a large round-shaped hill west of Menheniot, which would have caused a still wider turning movement and a further detachment to hold it whilst the attack was being made on Menheniot itself.

3. Though a good artillery position existed just north-west of point 468, there was no other safe position which could be occupied by the guns with the object of bringing converging fire to bear on the point of attack.

The chief disadvantage of plan (*b*) was that after occupying Coldrenick Hill it would be necessary to attack across a deep valley and gain the spur to the north, and then attack across another deep valley before the spur

south of Menheniot could be gained. This would probably be a somewhat lengthy operation, and it was desirable to attack the enemy as soon as possible, and drive back any hostile troops in front before they could be reinforced from the rear.

At the same time an advance on this side covered the most important high ground, and enabled the attacking infantry to be closely supported by artillery fire from the hill north of point 468, and from Coldrenick Hill.

It was suggested by one officer that the advanced guard might hold the position along the railway, thus blocking the enemy's advance, and there await the arrival of the main body. There is no doubt that this position is a fairly strong one, but it was considered that the following arguments rendered such a course undesirable.

It was unlikely that the enemy about Menheniot would be in great strength at the moment, because if so he would have pushed forward an advanced guard if advancing, or he would have established an outpost line if halted, whereas, so far, only hostile patrols had been met.

If the enemy was advancing he would certainly be shortly reinforced, and therefore it was desirable to attack him at once, and gain all the moral and material advantage of a small victory at the commencement of the fight.

To remain in the passive occupation of a defensive position would mean the loss of the initiative, and the possibility that a powerful advanced guard was being held up by a few dismounted troopers.

The weather was so thick owing to the heavy rain, that from the position on the railway embankment it was impossible to discover whether the ground about Menheniot was more suitable for occupation by the Red advanced guard than the railway line. It appeared, however, from the map that a good position facing north, and directly covering the advance of the main body, was to be found.

It was decided therefore that an immediate attack was desirable.

The director proposed the following plan for the attack on Menheniot. One battery to come into action north of point 468, where it would be sufficiently protected by the cavalry who were holding the bridge to the north and who were scouting towards Cartuther. One company of No. 1 battalion, which was leading, was sent up to occupy Coldrenick Hill and the neighbourhood, so that a battery could safely come into action there.

NOTE.—The action of this company would form a useful scheme for an hour or two. The officer commanding would require to know which road the battery was going to advance by, and would have to occupy any ground near the hill whence the enemy might develop infantry fire at effective range whilst the battery was coming into action. It is possible that more than one company would be required for this duty.

Another company of No. 1 battalion to be sent at the same time to occupy and hold the spur just north-west of Coldrenick. It was necessary to make good this spur before the main attack could deploy across the bridge and advance up the spur south of Menheniot. The remainder of No. 1 battalion to be in general reserve in the valley by the railway bridge, ready to support the companies on the left bank of the river Seaton or the main attack.

The bridges south of Menheniot being intact, it was proposed to send the engineer company to occupy, and prepare for defence, the north side of the railway embankment north of the inn; this company could also support the main attack with fire, and would form a strong rallying point if the main attack was repulsed.

These arrangements having been made, No. 2 battalion is directed to move down the hollow lane running north from the Inn, cross the bridge under cover of its scouts, and

deploy for attack. This attack was then followed by the officers on the ground. One company was deployed west and one company east of the road, the road itself being given as the line of direction for the inner flank of each company.

The following points were then discussed: The length of front each company should occupy when first deployed. The efficacy of the supporting fire from the engineers on the embankment. The method of communication between the two companies deployed for the attack. The action of the scouts in front, and method of signalling back information. The best way of informing the artillery of the exact position of the hostile infantry. The enemy not having opened fire with artillery, the Red guns were able to devote their whole attention to the Blue infantry.

The advance of the two companies was then considered in detail, especially the method of gaining ground from field to field over the high banks. The officers accompanied the director up to Menheniot village, where the second situation was issued.

Second Situation.

1. You have just carried Menheniot village and have occupied the cross roads three-quarters of a mile to the north-east, also point 453 and the hill half a mile south-east of Roseland. The enemy has drawn off northwards, but hostile artillery have just opened fire for the first time from the direction of Pengover Green, and there is every indication that a serious attack is about to be made on your position.

2. A battalion and another battery from the main body has just reached the bridge half a mile south of Menheniot village, but no more reinforcements are expected for two hours.

3. State what dispositions you would make for holding the ground you have gained.

The problem was not easy to solve: only three battalions were available, and the unusually large proportion of guns could not be put to the best use owing to the thick weather.

Several schemes of defence were suggested by different officers, and they may be summarised in three classes.

(*a*) To hold the line of the high ground facing north from the spur ½ mile north-east of Doddycross, through point 453, to the hill south-east of Roseland.

(*b*) To neglect the hill south-east of Roseland and occupy the same line of defence as in (*a*), but with the right flank thrown back from the cross roads three-quarters of a mile north-east of Menheniot to Doddycross.

(*c*) To hold the hill south-east of Roseland, and the high ground about point 453, the right flank resting on a bank about 200 yards south-west of the cross roads mentioned in (*b*).

There were serious objections to all these suggestions, and with the limited view caused by the heavy rain it was difficult to arrive at sound conclusions.

The defence of the hill south-east of Roseland, and of the ground about point 453, was easy. There were strong banks facing north, with a good field of fire in such thick weather. The great difficulty was the defence of the right flank, especially of the ground about the cross roads north-east of Menheniot. It would be an interesting problem for officers to deal with on a clear day, when full use could be made of the large number of guns.

As regards plan (*a*), the length of front is two miles, which with three battalions would give less than one man to the yard. On the other hand, the right flank on the

spur north of Doddycross is protected by the river Tiddy, which, though not a serious obstacle, has no crossing between Hepwell bridge and Tilland, except a foot bridge half a mile south of the former. The line of retreat from this flank was bad.

As regards plan (*b*), the weakness of the defence of the cross roads north-east of Menheniot was accentuated, and as the main road from St. Ives, by which the enemy was believed to be advancing, led straight to these cross roads, this was a very serious drawback.

The advantage of plan (*c*) was that the force was concentrated, and provided the attack came from the direction of Pengover Green, there is little doubt that the position could be held for two hours. The chief drawback was that if the enemy advanced along the direct road from St. Ives, fresh disposition must be made to meet him, or else the position would be turned.

The director was at first in favour of plan (*c*), but after considering the above points, he thought it was necessary to hold the hill half a mile south of Hepwell bridge as an advanced post, and be prepared to reinforce it to some extent if necessary.

Considering the state of the weather, and the small part that the artillery could take in the action, he recommended the following plan.

To keep a large portion of the troops in reserve till it was apparent whether the enemy was attacking from the direction of Pengover Green or Hepwell Bridge.

Meanwhile to direct the officer commanding No. 1 battalion to occupy the hill south-east of Roseland with two companies, and the high ground about point 453 with two more. The rest of the battalion to remain in reserve at the inn at Menheniot. The officer commanding No. 2 battalion to occupy the hill ½ mile south of Hepwell Bridge with two companies, and be prepared to reinforce

them with two more companies if a serious attack developed on that side. The remainder of the battalion to remain in reserve at the cross roads ¾ mile north-east of Menheniot. No. 3 battalion to be brought up in general reserve to the north side of Menheniot.

The artillery commander to detach one section to the south-east side of the Roseland hill to bring flanking fire to bear on the ground north of point 453; the remainder of the battery to find a position west of point 453. One section of the second battery to be detached to the cross roads to assist in the defence of the eastern flank, and the remainder of the battery to find a position east of point 453. The third battery to be brought up to Menheniot, and remain in reserve till the direction of the enemy's main attack became apparent, the officer commanding it to reconnoitre the ground so as to be prepared to assist the defence either on the right, left, or centre of the position.

The engineer company to proceed to the cross roads ¾ mile north-east of Menheniot, and assist in preparing that locality for defence, in the event of the advanced post on the hill ½ mile south of Hepwell bridge being driven back.

The squadron to leave one troop to continue to watch the ground on the right bank of the river Seaton, and the remainder to hold Hepwell bridge as long as possible, and then to retire round the right flank.

Third Situation.

1. The Blue attack is repulsed after heavy fighting; the main body of the Red force is now coming up, and is about to bivouac in the valley south of Menheniot.

2. The officer commanding the advanced guard is directed to establish outposts covering this bivouac for the night. Cavalry patrols report that Trevartha and Hep-

well bridge are clear of the enemy, but they are stopped by hostile fire from Pengover Green.

3. Describe the composition and distribution of your outposts for the night.

There was not sufficient time to enable officers to carry out this scheme in detail and to visit the picquet line. In fact, this situation alone would form a good exercise for one morning's work.

The director made the following remarks on the best manner of dealing with it:

The outposts were required to give ample warning of any hostile advance during the night, or at dawn on the following day, so that the main body could occupy its fighting position without hurry or confusion. This being the case, it was necessary to consider where that fighting position should be. There is no doubt that if the main body is called upon to fight near its bivouac it must occupy the position held by the advanced guard during the afternoon of October 2.

If the outposts are placed in this position, they may be driven back before the main body has time to come up. It is essential, therefore, that the outposts must watch and defend a line farther north.

In such country, where the fields are small and are enclosed by banks six feet high, it is quite out of the question for the enemy to advance during the night in large bodies except by the roads.

If therefore we place outpost companies on the road, our bivouac should be secure for the night.

The following dispositions are suggested:

1. No. 1 outpost company facing east, half a mile east of Doddycross, with a picquet thrown forward towards Tilland.

2. No. 2 outpost company at Hepwell bridge, with a picquet thrown forward on the St. Ives road.

3. No. 3 outpost company at the branch roads half a mile north of point 453, with two picquets, one on the road to Pengover Green and the other on the road leading north to St. Ives. We know that the outposts here will be in touch with the enemy, so we shall require a support in rear.

4. No. 4 outpost company on the track a quarter of a mile south of Trevartha, with a picquet on the north side of Trevartha.

5. No. 5 outpost company at the branch roads just north of Cartuther, with a picquet at the smithy.

One company might be detached to the hill south of Hepwell bridge, as a support to No. 2 outpost company, which is guarding one of the enemy's main lines of approach.

Two companies in reserve north of Menheniot.

This disposes of one battalion, which should form sufficient protection for the night.

There are several instructive points which require consideration by regimental officers.

The method of communication between outpost companies. In country of this nature the roads and tracks must be used for the purpose, unless there is time to discover and mark a line of gates. A study of the roads and tracks along the front of the outpost line will disclose the fact that in this case there is no great difficulty. Rapid communication between the outpost companies and the reserve must also be arranged for, because it is unlikely that lamp signalling could be established in such intersected country.

The amount of resistance which is to be offered by each outpost company. For example, the officer commanding No. 2 company might be told that he is to hold on to

Hepwell bridge till his position is untenable, and not till then should he fall back on the hill half a mile to the south, where reinforcements will be sent to him from the reserve. No. 3 company might be told that he is to hold the branch roads, where he will be reinforced if necessary. No. 4 company that if driven back he must retire to the hill half a mile south-east of Roseland, where he will meet supports. No. 5 company that he should retain possession of the branch roads long enough to give ample warning to the officer commanding outposts, and then if heavily attacked to retire on Roseland and hold the bridge south of that place, as the hill just east of him will be held to the last.

In this way every one will know the general scheme of resistance, and what each outpost company is required to do.

The question of feeding the men on outpost duty and bringing up their blankets for the night. This is a matter which requires forethought on the part of battalion commanders when first moving out of the bivouac on the morning of October 2.

The following special idea for Blue was prepared before the exercise commenced, and was adhered to throughout:

SPECIAL IDEA, BLUE.

1. The Blue force is even more strung out than the Red force.

2. When the Red advanced guard first approaches Menheniot station the squadron with the Blue advanced guard has one troop at the bridge north of point 468, one troop at the bridge north of Menheniot station, and the remainder on the spur just north of Coldrenick.

3. The officer commanding the Blue advanced guard having heard that a Red force was advancing through Hessenford, and being anxious to gain the right bank of the

Tiddy without opposition, had crossed at a bridge 1¼ mile above Hepwell bridge.

4. In the first situation the Blue vanguard, consisting of half a battalion of infantry, had just reached Menheniot, and occupied a position at the south edge of the village.

5. In the second situation the whole of the Blue advanced guard, which is composed of two battalions of infantry, one battery of artillery, and one squadron of cavalry, attacks south from Pengover Green.

6. The Blue main body does not commence to arrive at Pengover Green till the above attack is repulsed, and the Blue force bivouacs two miles north of Pengover Green, covered by outposts to the south.

CHAPTER XXI

WAR COURSES

A FORM of instruction called a War Course has been tried with some success, and is worthy of consideration. It somewhat resembles a Regimental Tour, but instead of being conducted by the commanding officer of the unit, it is usually under the direction of a brigade or divisional commander, assisted by officers of the General Staff.

The scope of these War Courses can be altered to suit the rank of the officers who take part in them. The original idea was that a type of everything which either a battalion, a battery, or a squadron will be required to do in war should be practised on the ground, much in the same way as already suggested for Regimental Tours. There is, however, one important difference between a Regimental Tour and a War Course: the former is intended to *practise* officers in the solution of tactical and administrative problems, the latter is intended to *instruct* officers in the art of solving these problems.

For this reason a lecture is given every morning at about 9.30 A.M. on the subject which it is intended to discuss on the ground during the day. The officers are then taken out to suitable ground, and the director himself works out some tactical or administrative problem. He explains all the difficulties which arise in war, he brings forward the principles contained in Combined Training and other official books which deal with the subject, and shows the officers how these principles can be applied in each case.

The officers look on, make suggestions, question the decisions of the director if they can think of something better themselves, and make copious notes on the various subjects which are discussed.

In the evening a conference is held, when the director brings forward and discusses with the officers the most important points which have been raised on the ground or during the lecture in the morning.

The officers who take part in the course are not overburdened with work during the course—in fact, they have nothing to do except to listen, put forward suggestions, and, if they feel capable of doing so, try a passage of arms with the director when they do not agree with him. The instruction imparted, however, seems to be very considerable: officers have plenty of time to think about the various problems that are put before them; they have plenty of time to study the ground, and, above all, the conversations amongst themselves are invaluable.

As in the other exercises, officers of both infantry and artillery should take part in the course, and, if the director likes to vary the course and ask the officers to solve a few of the problems produced by the various situations, an artillery and infantry officer should work together.

The work of the director is very hard—in fact, it is too much for one officer to conduct without assistance. The course is usually held by the divisional commander, and the work is divided up between him and his general staff officer. The latter would give the lecture in the morning, the divisional General and the staff officer would take turns at working out the various problems on the ground, and the former would hold the conference in the evening. If one officer attempts to do the whole of the work he will get so weary that the instruction will suffer greatly. Any form of teaching, if the subject is at all complicated, demands the expenditure of a good deal of energy on the

part of the instructor. A man whose brain or voice is tired or who has come to the end of his daily supply of energy cannot impress his audience with the truth and reality of his teaching. He has not only to repeat a certain number of words in order to convey instruction; it is necessary for him to make use of a curious telepathic power well known to lecturers and orators, by which alone he can impose his teaching upon his audience. This peculiar power is a much more common attribute of the human race than is generally supposed—in fact, it appears to be possessed by every one who is a master of his subject and who believes in the fundamental truth of what he is trying to teach. It is very easy for a man to say that he has not the gift of imparting instruction, but usually it means that he has not the necessary knowledge.

We encounter great differences in the various instructors that we come across, both as regards their style of speaking and their method of dealing with the subject. We have, in one scheme, what we may describe as the taciturn instructor, who says very little, but whose every word is well worth listening to, and who delivers a concentrated essence of the subject; and, on the other hand, we have the fluent and perhaps even garrulous instructor, whose gems of learning are somewhat obscured by a mass of words. In the one case there is too much whisky and in the other too much soda water for the really palatable and refreshing beverage of science. A happy medium between the two appears to be the object of our aspirations.

In any case, this power of imparting instruction decreases very rapidly when the brain or the body is tired; the available supply of energy is used up, and without it little can be done.

The method of conducting the War Course is very simple, and much the same as that described for a Regimental

Tour, except that the scheme of operations is not as a rule continuous.

An area is selected similar to that suggested for a Regimental Tour, where the ground is fairly enclosed, where there are many small tactical points, but where there is sufficient view for artillery to afford infantry adequate support. The ground should be close to the place where the officers are accommodated for the course, or else be within easy reach by rail, with suitable trains in the morning and afternoon. The officers assemble on Sunday night, and the course begins by a lecture on camps, billets, and bivouacs at 9.30 A.M. on Monday.

The director then takes the officers on to the ground and issues a situation which demands the billeting of a small force in one or two villages and adjacent farms. The scheme is necessary, partly because the direction of the advance of the force must be known, but chiefly because it will be necessary to arrange for the troops to get out of their billets into the fighting position in case they are attacked. All the details of billeting would be thoroughly studied on the ground; the feeding and watering of the men and horses, the traffic on the adjacent roads and in the villages, policing, communication, sanitation, rapid transmission of orders, and many other matters of a similar nature would require attention. The whole of these details would be worked out by the director from house to house or farm to farm; the officers under instruction would ask for reasons when they did not appreciate a statement, or for further elucidation of any ambiguous matter. They would be invited to make suggestions and to try and improve on the methods adopted by the director. Every opportunity should be taken to encourage discussion on any important point, the object of the exercise being twofold: first, to instruct the officers themselves, so that if they marched into such a village in war they would know

all the difficulties which would be likely to arise and how to overcome them; and secondly, to teach them how to instruct their own junior officers or senior non-commissioned officers.

When this exercise is completed the director can work out the details of a bivouac on the ground in a similar manner. About four or five hours on the ground is quite long enough to devote to the two exercises. During this time the officers will be making notes, and when they return to the hotel or camp in the afternoon these notes can be amplified whilst the subject and the ground are still fresh in their memories.

There will be no more work for the officers till the conference, which will be held by the director in the evening. On return to the hotel the director with his general staff officer should prepare notes for the evening conference, recapitulating all important points that had been discussed on the ground, and paying particular attention to the application of the principles laid down in the official books on training to the situation worked out during the day.

The training book says we should aim at doing a certain thing or adopting a certain course of action, but in the situation we studied on the ground perhaps we were unable to apply this principle; if so the reason should be thoroughly grasped, and probably in the end we shall find that we failed to apply the principle because we did not set about it in the right way.

In this manner the official training books can be made to be of perpetual service to officers when learning their profession, and consequently the principles they inculcate will be applied in war with far more certainty than if they were learnt by heart merely by studying the book.

The following programme of lectures and subjects for studying on the ground has been found to be suitable:

Monday. Bivouacs, billets, and camps.
Tuesday. Outposts.
Wednesday. Attack.
Thursday. Defence.
Friday. Advanced and rear guards.
Saturday (morning only). A lecture on night operations and some concluding remarks by the director.

These subjects can, of course, be varied to suit the class of instruction it is intended to impart; it should be remembered, however, that only those subjects should be dealt with which can be studied on the ground. A scheme and a series of situations should be prepared for each day's work, in the manner suggested in Chapter XX. for a "one day" tactical exercise on the ground. The scheme for the next day should be issued after the conference each evening, and the various situations issued on the ground. If possible a continuous scheme should be prepared, as it is easier for the officers to follow the operations, but the important thing is to make the best use of the ground which is available in the vicinity, and it will be found, as a rule, that fresh schemes must be prepared each day.

The lectures each morning can be based on Combined Training or some other official manual which deals with the particular subject. Combined Training is essentially a book containing general principles, and there is plenty of material for an instructive lecture in a few pages of the book. The principles laid down can be amplified, the method of their application explained, and some of the difficulties which usually arise during their application can be indicated, discussed, and methods for overcoming them suggested. These lectures should be prepared beforehand, and every effort made to illustrate the various principles by reference to success or failure in past campaigns.

The work on the ground is carried out in precisely the same manner as suggested in Chapter XVIII., except that, as already indicated, instead of the officers being asked to solve the various problems, the latter are dealt with by the director or his general staff officer, who will suggest the various courses open to the commander, and discuss any alternative courses which the officers under instruction should be encouraged to bring forward.

The fact that the director knows what the enemy is going to do does not seriously detract from the instruction imparted—in fact, if he prefers it, the director can easily create situations where he does not know what the enemy will do. It will be remembered that the only object of writing down beforehand a description of the intentions and actions of the enemy was to safeguard the officers who were working out the problem, so that the director should not be tempted to defeat them by making the enemy's action checkmate any plan that was put forward. In the case before us the director or his staff officer is working out the problem, and not the officers, so the latter can be left to bring forward possible courses which the enemy may adopt, and which would seriously embarrass the plans recommended by the director. This they will do with great satisfaction.

Printed by Ballantyne & Co. Limited
Tavistock Street, Covent Garden, London